DOCUMENT RESUME

ED 299 022 PS 017 528

AUTHOR Buckleitner, Warren
TITLE 1988 Survey of Early Childhood Software.
INSTITUTION High/Scope Educational Research Foundation, Ypsilanti, Mich.
REPORT NO ISBN-0-93-1114-32-2
PUB DATE 88
NOTE 155p.
AVAILABLE FROM High/Scope Press, 600 North River Street, Ypsilanti, MI 48198 ($20.00).
PUB TYPE Guides - Non-Classroom Use (055) -- Computer Programs (101) -- Book/Product Reviews (072)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Computer Software; Computer Software Reviews; Computer Uses in Education; Early Childhood Education; *Instructional Material Evaluation; *Microcomputers; Selection; *Young Children

ABSTRACT

This book reviews over 250 computer programs oriented toward the three- to six-year age range. Each program has been screened with checklists designed to rate such factors as ease of use, content strength, instructional design, and developmental appropriateness. The opening section contains an alphabetical list of all the software titles covered, and an illustrated guide to understanding the ratings given to each program. A "scan" page summarizes general statistical information about the survey, including how many programs are available for each kind of computer, how many employ a joystick, and how many require a color monitor. The second section consists of alphabetically arranged program descriptions, which include a narrative description, numerical ratings, and a sample screen picture for each program. Practical information, such as retail price and the computer and equipment needed to make the program work, is provided for each program. The third section contains the seven-page form used to evaluate the programs, and an explanation of how numerical ratings were calculated. Appendices answer common questions about software producers, content areas, number of titles in conceptual areas, programs for different computer brands, and the meaning of terms. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED299022

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

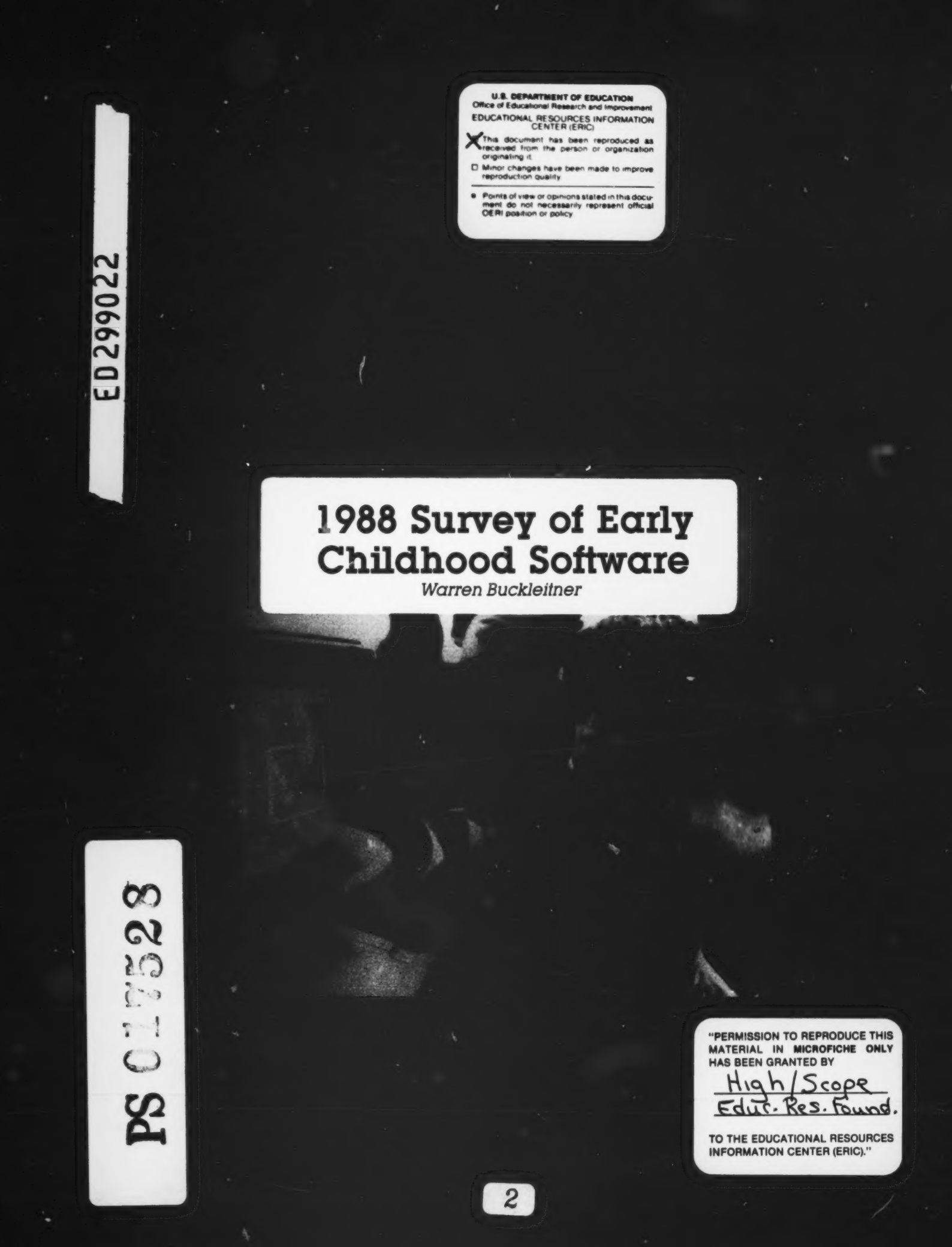
X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

1988 Survey of Early Childhood Software

Warren Buckleitner



PS 018528

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

High/Scope Educ. Res. Found.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

1988 SURVEY OF EARLY CHILDHOOD SOFTWARE

1988 SURVEY OF EARLY CHILDHOOD SOFTWARE

by
Warren Buckleitner

THE HIGH/SCOPE PRESS
A Division of the High/Scope Educational Research Foundation

Copyright © 1988 by the High/Scope Educational Research Foundation, 600 N. River St., Ypsilanti, MI 48198. All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system, without permission in writing from the publisher.

Editor: Marge Senninger
Cover Design: Susan Skarsgard

The following names are used throughout the *1988 Survey of Early Childhood Software* and are registered trademarks of the companies indicated:

Apple Computer Company: Apple II, IIe, IIc, IIGS, MacIntosh, Imagewriter, Imagewriter II
Atari, Inc.: Atari 400, 600, SE
Borg-Warner Educational Systems: Ufonic voice system
Commodore Business Machines: PET, C64/128, Amiga, Vic-20
Dunamis Corp.: PowerPad, WonderWorker
International Business Machines, Inc.: IBM Personal Computer
Tandy, Inc.: Radio Shack TRS-80 Models
Street Electronics Corp.: Echo II, II +, IIb, Cricket
Sunburst Communications, Inc.: Muppet Learning Keys
Personal Touch Corp.: Touch Window

ISBN 0-93-1114-32-2

Printed in the United States of America

CONTENTS

Introduction 1

1 Using the Survey 3

Index of Software Titles **4**
Guide to the Software Descriptions **10**
Scan of Software Descriptions **14**

2 Software Descriptions 15

3 Evaluation Process 113
Early Childhood Software Evaluation Instrument **114**
Calculation of a Component Score **121**

Appendix 1: Early Childhood Software Producers **123**

Appendix 2: Software Listing by Content Area **127**

Appendix 3: Tally of Software Titles
by Conceptual Area **135**

Appendix 4: Software Listing by Computer Brand **137**

Appendix 5: Glossary **149**

INTRODUCTION

Welcome to the *1988 Survey of Early Childhood Software!* Now in its fourth year, the *Survey* is the result of our extensive and continuing study of computer programs for young children. It is designed to assist parents, teachers, and early childhood educators in finding developmentally appropriate software for children aged three to six years.

This year's *Survey*, which is available in either book or disk* form, reviews 286 programs. These are primarily programs for the Apple, C64, IBM, and Atari computers. Each program is described and given ratings based on its (1) user friendliness, (2) educational value, and (3) instructional design. An overall rating is given as well. Other components of the *Survey* include a list of names and addresses of software producers, a glossary, the rating forms used in evaluating the software, and a variety of listings of the software titles — by content area, by overall rating, and by computer brand.

A glance at the *Survey* shows there's a wide range of software available for young children — everything from drill-and-practice activities to open-ended programs that stimulate creative artwork and language — but a glance at the ratings shows how widely the quality of this software varies. Experts agree that software that is easy to use, strong in content, and designed with the special qualities of a young child in mind is the key to children's enjoyment and learning at the computer. Not all that we've seen is appropriate by these measures, but we are happy to report that **there's plenty of good software available** for most popular computer models and that since last year's *Survey*, the software for young children has gotten better.

Why is High/Scope reviewing computer software? Since 1962, the High/Scope Educational Research Foundation has been studying and supporting the development of young children. During the late 1970s, we began to explore the use of computers with young children, and since that time, the High/Scope Foundation has been carefully integrating computer technology into the early childhood curriculum at its demonstration school in Ypsilanti, Michigan. The result is that today's visitor sees young children at our school using computers as routinely as they use blocks and art materials. These years of experience have taught us that the success of computer-based learning for young children depends on (1) the quality of the overall preschool or kindergarten curriculum, (2) the quality of the computer software, and (3) the software's match with the goals of the curriculum. Publishing these software reviews is one way we can share our experience with others who are looking for quality in young children's software.

High/Scope, a nonprofit organization, receives no fees or monetary consideration from either publishers or distributors for reviewing their software. Our work is supported by grants where possible and by subscriber fees for our services and publications.

For information about *Key Notes* (our monthly computer newsletter for early childhood educators), or about our training workshops (which include hands-on experience with the software in this *Survey*), write to the High/Scope Press, 600 North River Street, Ypsilanti, Michigan 48198, or phone (313) 485-2000.

*Disk form consists of AppleWorks files and requires an Apple IIe, IIc, or IIGS computer (128K), a disk drive, and AppleWorks software ($20.00).

1

USING THE SURVEY

This chapter contains (1) an alphabetical index of software titles, indicating the page numbers of the program descriptions in Chapter 2; (2) a guide to interpreting the software descriptions in Chapter 2; and (3) a computer scan, or summary, of *Survey* information.

INDEX OF SOFTWARE TITLES

Title	Company	Date	Page
ABsCenes	Compu-Teach	1984	16
Adventures in Space	Scandura Training Systems	1983	16
Adventures of Dobot, The	Educational Activities	1986	16
Adventures of Jimmy Jumper	E.C.S.	1986	17
Alice in Wonderland	HRM Software	1985	17
Alien Counter & Faceflash	Milliken Publishing Co.	1982	17
Alpha Build	Spinnaker Software Corp.	1984	18
Alpha Teach	Aquarius	1982	18
Alphabet Arcade, The	PDI Software	1983	18
Alphabet Circus	DLM	1984	19
Alphabet Song and Count	Edusoft	1983	19
Alphabet Sounds	Data Command	1984	19
Alphabet Zoo	Spinnaker Software Corp.	1983	20
Alphabetization Sequence	Milliken Publishing Co.	1980	20
Alphabots	D.C. Heath & Company	1985	20
Alphaget	Alphaphonics	1982	21
Animal Hotel	Learning Technologies, Inc.	1985	21
Animal Photo Fun	DLM	1985	21
Arithmatic	Compu-Teach	1983	22
Arithmatic Critters	MECC	1986	22
Astro's ABCs	Alphaphonics	1984	22
Astro-Grover	CBS Software	1984	23
Beginner Reader	Scandura Training Systems	1983	23
Beginning Counting	MicroEd, Inc.	1987	23
Beginning Reading Skills	MicroEd, Inc.	1986	24
Best Electronic Word Book Ever!	Mindscape, Inc.	1985	24
Big Bird's Funhouse	CBS Software	1984	24
Big Bird's Special Delivery	CBS Software	1984	25
Bike Hike	Learning Technologies, Inc.	1985	25
Bird's Eye View	Hartley Courseware, Inc.	1987	25
Body Awareness	Mindscape, Inc.	1983	26
Bouncy Bee Learns Letters 1.0	IBM Educational Systems	1985	26
Bouncy Bee Learns Words 1.0	IBM Educational Systems	1985	26
Bremen Town Musicians	Troll Associates	1987	27
Build a Book About You	Scarborough	1985	27
Bumble Games	The Learning Company	1982	27
Castle Clobber	Mindscape, Inc.	1985	28
Cat 'n Mouse	MindPlay	1984	28
Charlie Brown's 1-2-3's	Random House Software	1985	28
Charlie Brown's ABC's	Random House Software	1984	29
Color Find	E.C.S.	1985	29
Color Me	Mindscape, Inc.	1986	29
Colors and Shapes	Hartley Courseware, Inc.	1984	30
Come Play With Pockets	World Book, Inc.	1984	30
Comparison Kitchen	DLM	1985	30
Conservation and Counting	Hartley Courseware, Inc.	1985	31
Copycats: ABC for Micro & Me!	Educational Activities	1984	31
Cotton Tales	MindPlay	1987	31
Counters	Sunburst Communications, Inc.	1983	32
Counting	MECC	1983	32

INDEX OF SOFTWARE TITLES

Title	Company	Date	Page
Counting	MicroEd, Inc.	1984	32
Counting Critters	Mindscape, Inc.	1987	33
Counting Critters 1.0	MECC	1985	33
Counting Skills	Aquarius People Materials	1984	33
Country Combo	Micro Power & Light	1982	34
Creature Creator	Designware, Inc.	1983	34
Critter Count	Aquarius	1982	34
Delta Drawing	Spinnaker Software Corp.	1983	35
Developing Language Skills	Intellectual Software	1983	35
Dinosaurs	Advanced Ideas, Inc.	1984	35
Diskovery Adding Machine	Intellectual Software	1984	36
Diskovery Take Away Zoo	Intellectual Software	1984	36
Dr. Peet's Talk/Writer	Hartley Courseware, Inc.	1986	36
Dr. Seuss Fix-Up . . . Puzzler	CBS Software	1985	37
Ducks Ahoy	CBS Software	1984	37
Early Childhood . . . Program	Educational Activities	1983	37
Early Elementary I	Compu-Tations	1982	38
Early Elementary II	Compu-Tations	1981	38
Early Games	Springboard	1984	38
Early Learning Friends	Spinnaker Software Corp.	1985	39
Early Math	MicroEd, Inc.	1987	39
Early Skills	Hartley Courseware, Inc.	1986	39
Easy as ABC	Springboard	1984	40
Electronic Crayon Series	Polarware/Penguin Software	1986	40
Ernie's Big Splash	CBS Software	1985	40
Ernie's Magic Shapes	CBS Software	1984	41
Estimation	Lawrence Hall of Science	1984	41
Explore Your World: The Weather	Grolier Electronic Publishing	1985	41
Exploratory Play	P.E.A.L. Software	1985	42
Explore-a-Story: A Great Leap	D.C. Heath & Company	1988	42
Extrateletactograph, The	DIL International	1986	42
EZ Logo	MECC	1985	43
Facemaker	Spinnaker Software Corp.	1982	43
Facemaker Golden Edition	Spinnaker Software Corp.	1986	43
Fantastic Animals	Firebird Licensees Inc.	1985	44
First Encounters	Educational Activities	1983	44
First Letter Fun	MECC	1985	44
First Letters and Words	First Byte, Inc.	1987	45
First Numbers: First Words	Educational Activities	1984	45
First Shapes	First Byte, Inc.	1987	45
First Steps to Reading	Grolier Electronic Publishing	1985	46
Fish Scales	DLM	1985	46
Floppy: Letters & Numerals	Floppy Enterprises	1983	46
Floppy: Match-ups in Mazes	Floppy Enterprises	1984	47
Floppy: Printing Practice	Floppy Enterprises	1983	47
Floppy: Same and Different	Floppy Enterprises	1983	47
Floppy: What Is Missing	Floppy Enterprises	1983	48
Flying Carpet, The	Learning Technologies, Inc.	1985	48
Fruit Tree/Gumball	BeCi Software	1983	48
Fun From A to Z	MECC	1985	49

INDEX OF SOFTWARE TITLES

Title	Company	Date	Page
Fun With Directions	Mindscape, Inc.	1984	49
Fun With Letters and Words	Wescott Software	1987	49
Fun With Memory	Wescott Software	1987	50
Fun With Numbers	Wescott Software	1987	50
Gertrude's Secrets	The Learning Company	1982	50
Getting Ready to Read and Add	Sunburst Communications, Inc.	1984	51
Grabbit Factory, The	D.C. Heath & Company	1983	51
Grandma's House	Spinnaker Software Corp.	1983	51
Grover's Animal Adventures	CBS Software	1985	52
Grownup and Small	Mindscape, Inc.	1987	52
Happy Birthday, Pockets	World Book, Inc.	1984	52
Hodge Podge	Artworx	1982	53
How to Weigh an Elephant	Learning Technologies, Inc.	1985	53
I Can Count	Troll Associates	1987	53
I Love My Alphabet	First Star Software	1984	54
Introduction to Counting	EduWare	1981	54
It's No Game	Educational Activities	1986	54
Jack and the Beanstalk	HRM Software	1985	55
Jar Game & Chaos, The	Milliken Publishing Co.	1982	55
Jr. Typer	Aquarius People Materials	1985	55
Juggle's Rainbow	The Learning Company	1982	56
Keytalk	P.E.A.L. Software	1987	56
Kid's Stuff	Stone & Associates	1984	56
Kids on Keys	Spinnaker Software Corp.	1983	57
Kidwriter	Spinnaker Software Corp.	1984	57
Kinder Koncepts MATH	Midwest Software	1985	57
Kindercomp	Spinnaker Software Corp.	1982	58
Kindercomp Golden Edition	Spinnaker Software Corp.	1986	58
Kindermath II	Houghton Mifflin	1988	58
Knowing Numbers	Mindscape, Inc.	1983	59
Koala Pad Graphics Exhibitor	PTI/Koala Industries	1983	59
Language	Aquarius People Materials	1984	59
Learning About Numbers	C&C Software	1983	60
Learning Line, The	D.C. Heath & Company	1983	60
Learning the Alphabet	MicroEd, Inc.	1987	60
Learning With Fuzzywomp	Sierra On-Line	1984	61
Learning With Leeper	Sierra On-Line	1983	61
Let's Go Fishing	Learning Technologies, Inc.	1985	61
Letter Games	Island Software	1982	62
Letter Recognition	Hartley Courseware, Inc.	1983	62
Letter-Go-Round	CBS Software	1984	62
Letters and First Words	C&C Software	1984	63
Letters and Words	Mindscape, Inc.	1983	63
Lion's Workshop	Learning Technologies, Inc.	1985	63
LOGO Power	Mindscape, Inc.	1986	64
Magic Crayon	C&C Software	1983	64
Magic Slate	Sunburst Communications, Inc.	1984	64
Magic String, The	Troll Associates	1985	65
Make a Match	Springboard	1984	65
Many Ways to Say I Love You	Mindscape, Inc.	1985	65

INDEX OF SOFTWARE TITLES

Title	Company	Date	Page
Mary Marvel . . . Costume Ball	DIL International	1986	66
Mary Marvel . . . the Garden	DIL International	1986	66
Mask Parade	Springboard	1984	66
Match-On-A-Mac	Teach Yourself by Computer	1986	67
Math and Me	Davidson and Associates	1987	67
Math Facts Level 1	THESIS	1980	67
Math Magic	MindPlay	1984	68
Math Maze	D.C. Heath & Company	1983	68
Math Rabbit	The Learning Company	1986	68
Math Sequences	Milliken Publishing Co.	1985	69
Maze-o	D.C. Heath & Company	1985	69
Memory Building Blocks	Sunburst Communications, Inc.	1986	69
Memory Master	Stone & Associates	1985	70
Micro-LADS	Laureate Learning Systems	1984	70
Milk Bottles	Island Software	1982	70
Money Works	MECC	1987	71
Monkey Math	Artworx	1983	71
Moptown Parade	The Learning Company	1981	71
Muppet Word Book	Sunburst Communications, Inc.	1986	72
Muppets On Stage	Sunburst Communications, Inc.	1984	72
Muppetville	Sunburst Communications, Inc.	1986	72
Music	Lawrence Hall of Science	1984	73
Music Maestro	Springboard	1984	73
Music Readiness	Sterling Swift	1984	73
My ABC's	Paperback Software	1984	74
My Book	BeCi Software	1984	74
My Letters, Numbers, and Words	Stone & Associates	1983	74
My Words	Hartley Courseware, Inc.	1987	75
Not Too Messy, Not Too Neat	D.C. Heath & Company	1988	75
Notable Phantom, The	DesignWare	1984	75
Now You See It, Now You Don't	Sunburst Communications, Inc.	1987	76
Number BeCi	BeCi Software	1983	76
Number Farm	DLM	1984	76
Numbers	Lawrence Hall of Science	1984	77
Observation and Classification	Hartley Courseware, Inc.	1985	77
Odd One Out	Sunburst Communications, Inc.	1983	77
Ollie and Seymour	Hartley Courseware, Inc.	1984	78
One Banana More	Data Command	1984	78
Ordering/Sequencing	Aquarius People Materials	1984	78
Paint With Words	MECC	1986	79
Pals Around Town	CBS Software	1985	79
Path-Tactics	MECC	1986	79
Patterns and Sequences	Hartley Courseware, Inc.	1984	80
Peanuts Maze Marathon	Random House Software	1984	80
Peanuts Picture Puzzlers	Random House Software	1984	80
Peter and the Wolf Music	Spinnaker Software Corp.	1985	81
Peter Rabbit Reading	Spinnaker Software Corp.	1985	81
Picture Dictionary	D.C. Heath & Company	1985	81
Picture Perfect	MindPlay	1984	82
Pictures, Letters, and Sounds	Hartley Courseware, Inc.	1986	82

INDEX OF SOFTWARE TITLES

Title	Company	Date	Page
Play Together Learn Together	Grolier Electronic Publishing	1985	82
Pockets and Her New Sneakers	World Book, Inc.	1984	83
Pockets Goes on a Picnic	World Book, Inc.	1984	83
Pockets Goes on Vacation	World Book, Inc.	1984	83
Pockets Goes to the Carnival	World Book, Inc.	1984	84
Pockets Leads the Parade	World Book, Inc.	1984	84
Preschool Fun	THESIS	1980	84
Preschool IQ Builder I	PDI Software	1982	85
Preschool IQ Builder II	PDI Software	1984	85
Primary Editor 1.0	IBM Educational Systems	1985	85
Puss in Boot	Island Software	1982	86
Puzzle Master	Springboard	1984	86
Rabbit Scanner, The	E.C.S.	1986	86
Race the Clock	MindPlay	1984	87
Rainbow Painter	Springboard	1984	87
Reader Rabbit	The Learning Company	1984	87
Reading Comprehension: Lev. 1	Houghton Mifflin	1988	88
Reading Helpers	Houghton Mifflin	1986	88
Reading Machine, The	SouthWest EdPsych Services	1982	88
Reading Readiness	EMC Publishing	1982	89
Reading Starters	Houghton Mifflin	1986	89
Representational Play	P.E.A.L. Software	1985	89
Rhyming to Read	Grolier Electronic Publishing	1985	90
Rumpelstiltskin	Troll Associates	1987	90
Same or Different	Learning Technologies, Inc.	1985	90
Shape & Color Rodeo	DLM	1984	91
Shape Games	BeCi Software	1983	91
Shapes & Patterns	Mindscape, Inc.	1984	91
Shutterbug's Patterns	Learning Technologies, Inc.	1985	92
Shutterbug's Pictures	Learning Technologies, Inc.	1985	92
Simon Says	Sunburst Communications, Inc.	1987	92
Size and Logic	Hartley Courseware, Inc.	1984	93
SocPix	American Guidance Service	1985	93
Sound Ideas: Consonants	Houghton Mifflin	1986	93
Sound Ideas: Vowels	Houghton Mifflin	1986	94
Sound Ideas: Word Attack	Houghton Mifflin	1987	94
Sound Tracks	MECC	1984	94
Space Chase	EMC Publishing	1984	95
Space Waste Race	Sunburst Communications, Inc.	1984	95
Spaceship Lost	Educational Activities	1984	95
Spatial Relationships	Aquarius	1982	96
Spellicopter	Designware	1983	96
Spelling and Reading Primer	EduWare	1982	96
Spelling Bee, The	Troll Associates	1985	97
Starting Out: Set 1	NTS Software	1980	97
Stickers	Springboard	1984	97
Stickybear ABC	Weekly Reader Software	1982	98
Stickybear Math	Weekly Reader Software	1984	98
Stickybear Numbers	Weekly Reader Software	1982	98
Stickybear Opposites	Weekly Reader Software	1983	99

INDEX OF SOFTWARE TITLES

Title	Company	Date	Page
Stickybear Printer	Weekly Reader Software	1985	99
Stickybear Reading	Weekly Reader Software	1984	99
Stickybear Shapes	Weekly Reader Software	1983	100
Stickybear Town Builder	Weekly Reader Software	1984	100
Stickybear Typing	Weekly Reader Software	1985	100
Story Machine	Spinnaker Software Corp.	1982	101
Surrounding Patterns	Strawberry Hill Software	1985	101
Sweet Shop, The	D.C. Heath & Company	1983	101
Talk About a Walk	Intellectual Software	1984	102
Talking Nouns I	Laureate Learning Systems	1987	102
Talking Nouns II	Laureate Learning Systems	1987	102
Talking Teacher	Firebird Licensees Inc.	1985	103
Talking Textwriter	Scholastic Software, Inc.	1986	103
Talking Verbs	Laureate Learning Systems	1987	103
Teddy and Iggy	Sunburst Communications, Inc.	1987	104
Teddy Bear-rels of Fun	DLM	1987	104
Teddy Bears Counting Fun	Micro-Learningware	1981	104
Teddy's Playground	Sunburst Communications, Inc.	1985	105
Telling Time	Orange-Cherry Media	1984	105
Tiger's Tales: A Reading Adventure	Sunburst Communications, Inc.	1986	105
Time Master	Micro Power & Light	1980	106
Tink's Adventure	Mindscape, Inc.	1984	106
Tink's Subtraction Fair	Mindscape, Inc.	1985	106
Tinka's Mazes	Mindscape, Inc.	1986	107
Tonk in the Land of Buddy-Bots	Mindscape, Inc.	1984	107
Touch & Write	Sunburst Communications, Inc.	1986	107
Touch and Match	E.C.S.	1986	108
Touch and See	E.C.S.	1986	108
Toybox	S.D.L.	1986	108
Tuk Goes to Town	Mindscape, Inc.	1984	109
Up & Add 'Em	Spinnaker Software Corp.	1984	109
Webster's Numbers	EduWare	1983	109
What's in a Frame?	Sunburst Communications, Inc.	1987	110
Word Factory	Island Software	1983	110
Words	Lawrence Hall of Science	1984	110
Writing to Read 2.0	IBM Educational Systems	1982	111

GUIDE TO THE SOFTWARE DESCRIPTIONS

Title: Reading Comprehension: Lev. 1
Company: Houghton Mifflin
Date: 1988
Price: $174.00
Age: 6-7
Computer: Apple (64K)
Conceptual Area: LA/5.6.8
• Reading comprehension skills

Comments: Child uses spacebar, arrow keys, and RETURN to page through a story in which comprehension questions are asked through an Echo or Cricket synthesizer (required). Uses clear female voice. To assist reading, child can select and listen to any word in the story. Sixteen stories come on eight disks. Keeps records. Good design.

Final Rating: 82 ••••••••
User Friendliness: 60 ••••••
Educational Value: 95 ••••••••••
Instructional Design: 86 •••••••••

TITLE: The program's title.

COMPANY: The program's publisher. This is not necessarily the name of a software distributor. The address and phone number of the program's publisher are given in Appendix 1: Early Childhood Software Producers.

DATE: The program's most recent copyright date.

PRICE: The publisher's list price for the version of the program evaluated. Prices often vary with the type of computer and source of software.

AGE: The publisher's recommended age-range for the users of the program. Many software packages contain more than one game or activity, and the specified age-range takes into account the difficulty levels of all the various games or activities available. We mention in our comments if the publisher's recommended age-range seems inappropriate.

COMPUTER: A listing of the computers for which versions of the program are available. A star (*) is placed after any version used in evaluating the program.

Apple — Apple II family with at least 48K of memory
Apple IIGS — Apple IIGS
Amiga — Commodore Amiga
Atari — Atari family
C64 — Commodore 64
VIC 20 — VIC 20
IBM — IBM Personal Computer or compatible with color graphics adapter
Mac — MacIntosh
PET — Commodore PET
TRS 80 — Tandy Radio Shack
TI — Texas Instruments

Any additional hardware a program requires or can utilize, such as a voice synthesizer, a mouse, additional memory, a printer, is listed.

CONCEPTUAL AREA: A listing, from strongest to weakest, of the conceptual areas present in a program. The codes used refer to the lists found in Appendix 3. For example, CL/1 refers to the first item under the conceptual area of Classification, "Identifying attributes." (High/Scope Curriculum users will recognize some the Appendix 3 lists as incorporating the curriculum's "key experiences.")

Title: **Reading Comprehension: Lev. 1**
Company: Houghton Mifflin
Date: 1988
Price: $174.00
Age: 6-7
Computer: Apple (64K)
Conceptual Area: LA/5.6.8
• Reading comprehension skills

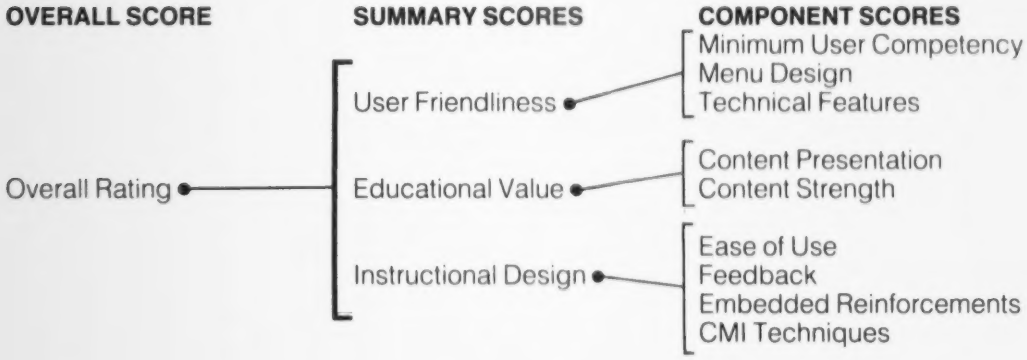
Comments: Child uses spacebar, arrow keys, and RETURN to page through a story in which comprehension questions are asked through an Echo or Cricket synthesizer (required). Uses clear female voice. To assist reading, child can select and listen to any word in the story. Sixteen stories come on eight disks. Keeps records. Good design.

Final Rating: 82 ********
User Friendliness: 60 ******
Educational Value: 95 **********
Instructional Design: 86 *********

The line under "Conceptual Area" contains a short description of the computer program's goals or objectives as stated by the producer.

COMMENTS: An overview of the program, what the child does when using the program, its strengths and weaknesses, and any special equipment requirements.

INTERPRETING THE RATINGS: The Early Childhood Software Evaluation Instrument rates each program with an *overall score*, which is the mean of nine component scores; with three *summary scores*, which are means of selected *component scores*; and with nine component scores. (Each of these elements is defined, starting on the next page.) The diagram below indicates how the three levels of scoring are related.



All scores are percents from 1 to 100 based on a program's performance on the evaluation instrument (Chapter 3). The scores are displayed in numerical form and as a bar graph with a row of 1 to 10 stars. The bar graph represents the score rounded to the nearest 10%. (For example, 47% = *****.) The software was evaluated with the assistance of the children and teachers in the High/Scope demonstration classroom at the High/Scope Educational Research Foundation in Ypsilanti, Michigan. Scoring was done by Warren Buckleitner.

Title: **Reading Comprehension: Lev. 1**
Company: Houghton Mifflin
Date: 1988
Price: $174.00
Age: 6-7
Computer: Apple (64K)
Conceptual Area: LA/5,6,8
- Reading comprehension skills

Comments: Child uses spacebar, arrow keys, and RETURN to page through a story in which comprehension questions are asked through an Echo or Cricket synthesizer (required). Uses clear female voice. To assist reading, child can select and listen to any word in the story. Sixteen stories come on eight disks. Keeps records. Good design

Final Rating: 82 ********
User Friendliness: 60 ******
Educational Value: 95 **********
Instructional Design: 86 *********

OVERALL SCORE

OVERALL RATING: The mean score of all nine component scores.

SUMMARY SCORES

Selected component scores are combined into the following scores:

USER FRIENDLINESS: The mean score of Minimum User Competency, Menu Design, and Technical Features.

EDUCATIONAL VALUE: The mean score of Content Presentation and Content Strength.

INSTRUCTIONAL DESIGN: The mean score of Ease of Use, Feedback, Embedded Reinforcements, and CMI techniques.

COMPONENT SCORES

MINIMUM USER COMPETENCY: A measure of the degree of computer skill a child needs to use the program independently. A program that allows the user to enter information via picture menus and arrow keys is more suitable for a young child than is a program that requires typing words or using SHIFT keys, the CONTROL key, or the function keys. This scale covers only the parts of the program intended for the child's use. It does not consider features designed for the teacher (e.g., setting difficulty levels). The higher the score, the easier it is for preschoolers and kindergartners to use the program.

MENU DESIGN: A rating of the ease-of-use of the menu(s). A menu is a point in the program when choices are listed and a child selects one of them and enters this choice into the computer. If the child can use and access a program menu, she or he can usually control the program without adult help. Using some menus, however, requires skills preschool children may not have, such as reading skill. The higher the score in this category, the easier the menu is for preschoolers or kindergartners to use.

TECHNICAL FEATURES: A rating of technical features of the program. Does the program permit a child to experiment with *all* the keys without "locking up?" Can a teacher easily use the program in a classroom situation where there is little time to review the program instructions? Does the program make effective use of the computer's capabilities?

CONTENT PRESENTATION: A rating of how well content is presented, including whether the program maintains a level of challenge; whether a child controls the functioning of the program; whether the content is

Title: **Reading Comprehension: Lev. 1**
Company Houghton Mifflin
Date 1988
Price $174 00
Age 6-7
Computer Apple (64K)
Conceptual Area LA/5,6,8
- Reading comprehension skills

Comments Child uses spacebar, arrow keys, and RETURN to page through a story in which comprehension questions are asked through an Echo or Cricket synthesizer (required) Uses clear female voice To assist reading, child can select and listen to any word in the story Sixteen stories come on eight disks Keeps records Good design

Final Rating: 82 ********
User Friendliness: 60 ******
Educational Value: 95 **********
Instructional Design: 86 *********

free from gender, racial, or ethnic bias; whether there are demonstrations; whether the program is free from unnecessary stimulation; and whether the central outcome is educational.

CONTENT STRENGTH: A rating of the accuracy and depth of the program's conceptual content.

EASE OF USE: A rating of the program's ease of use by a first-time user. Higher scores mean easier first-time use.

FEEDBACK: A rating of the feedback techniques employed by the program. This measures such factors as correlation between the keystrokes and screen events, appropriateness of feedback for preschool and kindergarten children, and reinforcement of content by feedback.

EMBEDDED REINFORCEMENTS: A rating of how well graphics and sounds used for rewards complement and reinforce content.

COMPUTER-MANAGED INSTRUCTION TECHNIQUES: A rating of the level of computer-managed instruction (CMI) techniques employed by the program. This score includes consideration of whether the program changes levels as the child progresses and whether the program keeps ongoing records. This score is not counted if (1) the program is completely open-ended (e.g., a drawing activity) or (2) the program permits the child or adult to set the difficulty level.

SCAN OF SOFTWARE DESCRIPTIONS

BACKGROUND INFORMATION: Some facts about the 286 programs we reviewed —

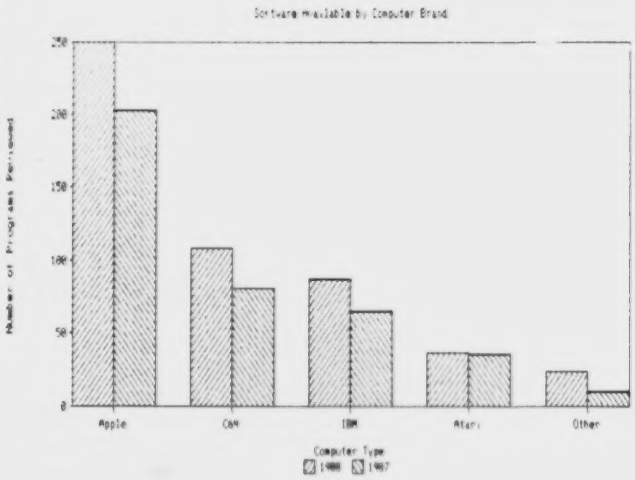
Copyright dates range from 1982 to 1988.
Prices range from $9.95 to $650.00.
$39.67 is the average price for a one-disk package.
61.1% is the average overall rating.
90% is the highest overall rating.
22% is the lowest overall rating.
71 companies produce early childhood software.
45 programs are open-ended in nature or are used by a child to create a product of some kind.
27 programs can "talk."
28 programs can utilize a printer.
4 programs can utilize a color printer.

USER INTERFACE: This *Survey* contains

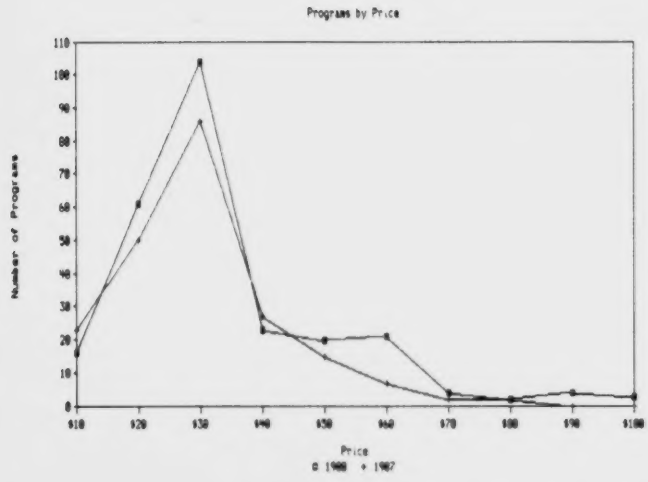
65 programs that use the arrow keys
44 programs that can work with a joystick
21 programs that can work with a mouse
10 programs that can work with a Touch Window
4 programs that can work with a Koala Pad

COMPUTER TYPES: Percent of reviewed software available for various brands of computers —

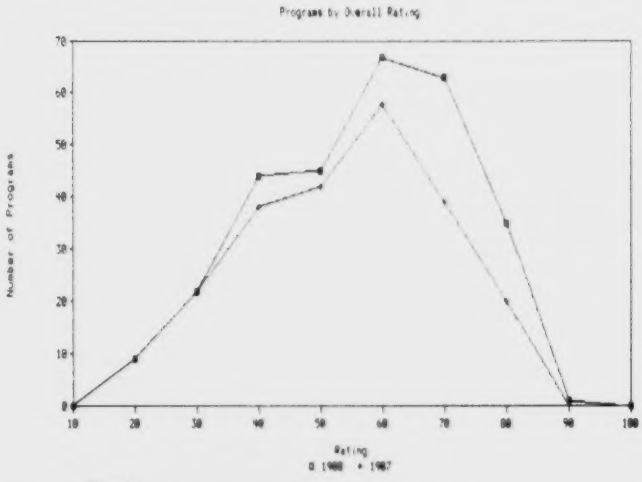
Apple	250/286	87.4%
C64	108/286	37.8%
IBM	87/286	30.4%
Atari	37/286	12.9%
TRS	7/286	2.4%
Amiga	7/286	2.4%
MacIntosh	6/286	2.1%
Apple IIGS	4/286	1.4%



LISTED PRICE



OVERALL RATINGS



2

SOFTWARE DESCRIPTIONS

This chapter contains an alphabetical listing of software descriptions.

Title: ABsCenes
Company: Compu-Teach
Date: 1984
Price: $39.95
Age: 3-6
Computer: Apple*, IBM, Mac
Conceptual Area: LA/4
- Letter recognition skills

Final Rating: 50 *****
User Friendliness: 60 ******
Educational Value: 61 ******
Instructional Design: 38 ****

Comments: Three games: (1) Pressing any letter results in music and picture. (2) Shows picture and asks child to press letter. (3) Shows picture, asks child to type whole word. No reading required.

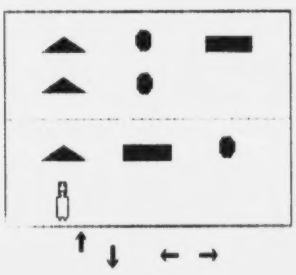
Title: Adventures in Space
Company: Scandura Training Systems
Date: 1983
Price: $29.95
Age: 3-7
Computer: Apple
Conceptual Area: SP/4
- Spatial relationships

Final Rating: 46 *****
User Friendliness: 28 ***
Educational Value: 56 ******
Instructional Design: 56 ******

Comments: Ten activities offered in spatial concepts, e.g., up and down, in and out, above and below. Sample problem: Where is the flower? (A) around the swarm of bees, (B) in the swarm, etc. No random generation or branching.

Title: Adventures of Dobot, The
Company: Educational Activities
Date: 1986
Price: $59.95
Age: 3-7
Computer: Apple*, IBM, C64
Conceptual Area: SP/4 CL/2 SE/2 OT/1
- Problem solving, critical thinking

Final Rating: 70 *******
User Friendliness: 77 ********
Educational Value: 87 *********
Instructional Design: 55 ******



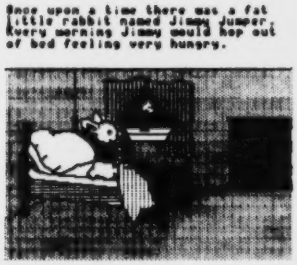
Comments: Seven simple games in which child uses arrow keys to move robot to sort letters, arrange rods according to length, match numerals, and practice with the arrow keys. Management tracks the progress of up to 50 children.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Adventures of Jimmy Jumper
Company: E.C.S.
Date: 1986
Price: $29.95
Age: 2.5-5
Computer: Apple
Conceptual Area: LA/1,8 SP/4
- Prepositional concepts

Comments: A story program of 12 screens. The story is told using an Echo II voice synthesizer while the graphics show the prepositional concepts. Child uses a game paddle or spacebar to advance the story screen-by-screen.

Final Rating: 69 *******
User Friendliness: 61 ******
Educational Value: 84 ********
Instructional Design: 65 *******


Once upon a time there was a fat
little rabbit named Jimmy Jumper.
Every morning Jimmy would hop out
of bed feeling very hungry.

Title: Alice in Wonderland
Company: HRM Software
Date: 1985
Price: $49.00
Age: 7-12
Computer: Apple
Conceptual Area: LA/5,8 TI/5
- Remembering a sequence of events

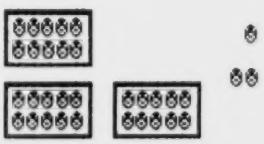
Comments: Modeled from the traditional story. Child uses arrow keys and RETURN to select two-word commands to explore Wonderland. How children proceed depends on the options they choose. Requires reading. Could be used as language experience with adult help.

Final Rating: 69 *******
User Friendliness: 67 *******
Educational Value: 70 *******
Instructional Design: 69 *******

Title: Alien Counter & Faceflash
Company: Milliken Publishing Co.
Date: 1982
Price: $39.95
Age: 5-8
Computer: Apple*, Atari
Conceptual Area: NB/3,4
- Numeral recognition, counting

Comments: Two games on one disk: Faceflash — child is shown from 1 to 49 faces for 10 seconds and is asked "How many?" Child selects own difficulty level. Alien Counter — child matches numeral with objects. Some reading required. Discontinued in 1986.

Final Rating: 51 *****
User Friendliness: 49 *****
Educational Value: 65 *******
Instructional Design: 44 ****



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Alpha Build
Company: Spinnaker Software Corp.
Date: 1984
Price: $9.95
Age: 4-8
Computer: Apple*, IBM, C64 (cartridge)
Conceptual Area: LA/4,5 CL/2 SP/4
- Upper/lower-case, alphabetical order

Comments: Child uses arrow keys or joystick to match letters to complete an alphabetical sequence or simple words. Eight levels, ranging from matching one letter to completing a word. Somewhat confusing graphics.

Final Rating: 56 ******
User Friendliness: 64 ******
Educational Value: 49 *****
Instructional Design: 54 *****

Title: Alpha Teach
Company: Aquarius
Date: 1982
Price: $39.95
Age: 3-6
Computer: Apple
Conceptual Area: LA/4
- Alphabet, initial consonants

Comments: Contains three activities: (1) shows continuous alphabet with no interaction, (2) shows display for any letter chosen, and (3) child matches object shown with initial consonant in a model word. Reading required. Discontinued in 1987.

Final Rating: 39 ****
User Friendliness: 37 ****
Educational Value: 48 *****
Instructional Design: 37 ****

Title: Alphabet Arcade, The
Company: PDI Software
Date: 1983
Price: $24.95
Age: 5-9
Computer: Apple*, C64, Atari
Conceptual Area: LA/4
- Alphabetizing, dictionary skills

Comments: Consists of three games in which child puts letters and short words in correct alphabetical order. No branching. Not recommended.

Final Rating: 42 ****
User Friendliness: 48 *****
Educational Value: 52 *****
Instructional Design: 31 ***

Title: Alphabet Circus
Company: DLM
Date: 1984
Price: $32.95
Age: 4-7
Computer: Apple*, IBM, C64
Conceptual Area: LA/4
- Letter recognition, alphabet order

Comments: Child presses any key to move a hat and spacebar to select one of six letter-recognition, alphabetical order, or keyboard-skill activities. Good sound and graphics. Best for age 5. Some reading.

Final Rating: 68 *******
User Friendliness: 54 *****
Educational Value: 89 **********
Instructional Design: 69 *******

Title: Alphabet Song and Count
Company: Edusoft
Date: 1983
Price: $29.95
Age: 3-7
Computer: Apple
Conceptual Area: LA/4 NB/3,4
- Alphabet order, counting skills

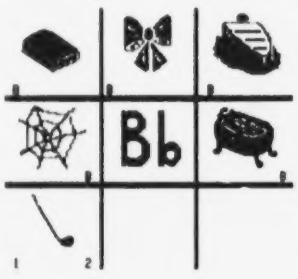
Comments: Two games: Alphabet Song — computer plays the ABC song as each letter of the alphabet is typed. Count — a branched activity for numbers 1-57. Simple reading required (e.g., "press spacebar").

Final Rating: 51 *****
User Friendliness: 35 ****
Educational Value: 57 ******
Instructional Design: 58 ******

Title: Alphabet Sounds
Company: Data Command
Date: 1984
Price: $84.95
Age: 5-7
Computer: Apple
Conceptual Area: LA/6
- Letter sounds, initial consonants

Comments: Three disks show eight pictures of each letter of the alphabet, one at a time. For vowels, a child must choose long or short (L or S); for consonants, whether the sound comes at the beginning or end (1 or 2). Smile/frown reinforcements. Low level of child-interaction. Not recommended.

Final Rating: 29 ***
User Friendliness: 35 ****
Educational Value: 33 ***
Instructional Design: 23 **



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Alphabet Zoo
Company: Spinnaker Software Corp.
Date: 1983
Price: $29.95
Age: 3-8
Computer: Apple*, IBM, C64 ($20.95)
Conceptual Area: LA/4,5
- Letter recognition

Final Rating: 51 *****
User Friendliness: 56 ******
Educational Value: 52 *****
Instructional Design: 48 *****

Comments: Poor menu design makes maze game difficult to use. Child uses joystick or ESDX keys to move a character through randomly generated mazes. Must find each letter in sequence of a model word given above the maze.

Title: Alphabetization Sequence
Company: Milliken Publishing Co.
Date: 1980
Price: $60.00
Age: 5-13
Computer: Apple
Conceptual Area: LA/4 CL/2
- Alphabetizing, letter discrimination

Final Rating: 67 *******
User Friendliness: 54 *****
Educational Value: 76 ********
Instructional Design: 69 *******

Comments: First of two-disk Language Arts Series for K-8. Contains 63 levels of alphabetizing drills, from letter discrimination (child presses Y if two letters are the same) to alphabetizing to the seventh letter. Uses sophisticated password and record-keeping system.

Title: Alphabots
Company: D.C. Heath & Company
Date: 1985
Price: $45.00
Age: 4-7
Computer: Apple
Conceptual Area: LA/4,5
- Letter recognition

Final Rating: 54 *****
User Friendliness: 50 *****
Educational Value: 69 *******
Instructional Design: 49 *****

Comments: Consists of five letter and word activities in which child must type in letters for shown objects. Model keyboard on screen shows key location on screen for help. Uses animated "robots" as reinforcement for correctly spelled words.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

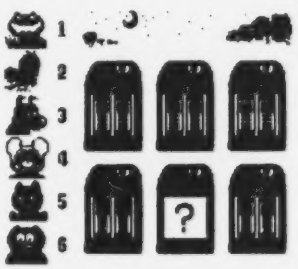
Title: Alphaget
Company: Alphaphonics
Date: 1982
Price: $50.00
Age: 5-6
Computer: Apple
Conceptual Area: LA/4,5
- Letter recognition practice

Final Rating: 51 *****
User Friendliness: 47 *****
Educational Value: 63 ******
Instructional Design: 47 *****

Comments: Presents simple maze context where child moves "Astro" (using arrow keys) to arrange letters or letter symbols in ABC . . . order. Upper/lower-case option available. Effective for practice with alphabetical order.

Title: Animal Hotel
Company: Learning Technologies, Inc.
Date: 1985
Price: $24.95
Age: 4-8
Computer: Apple
Conceptual Area: OT/1
- Memory skills

Final Rating: 45 *****
User Friendliness: 55 ******
Educational Value: 38 ****
Instructional Design: 40 ****



Comments: A memory game that shows either three (easy level) or six (hard level) animals and then hides each behind a different door. When shown a door, child selects animal behind that door by pressing a number key. Menu requires reading.

Title: Animal Photo Fun
Company: DLM
Date: 1985
Price: $32.95
Age: 4-8
Computer: Apple
Conceptual Area: OT/1
- Animals and their habitats

Final Rating: 70 *******
User Friendliness: 62 ******
Educational Value: 75 ********
Instructional Design: 73 *******

Comments: Six games in which children match animals with their habitats. Includes Animal Concentration and Animal Rummy. Child uses spacebar and RETURN to play with 36 animals from six habitats. Good graphics, sounds. Color monitor recommended.

Title: Arithmatic
Company: Compu-Teach
Date: 1983
Price: $39.95
Age: 5-7
Computer: Apple*, IBM, Mac
Conceptual Area: NB/3,4
- Counting skills

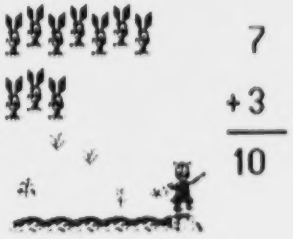
Comments: Two activities: (1) Child presses numeral key to see same number of objects appear and move off the screen. (2) Child sees one to nine objects; counting correctly causes objects to leave screen one at a time. No branching.

Final Rating: 60 ******
User Friendliness: 62 ******
Educational Value: 71 *******
Instructional Design: 52 *****

Title: Arithmatic Critters
Company: MECC
Date: 1986
Price: $55.00
Age: 5-7
Computer: Apple (64K)
Conceptual Area: NB/3,6,7,9
- Counting, addition, and subtraction

Comments: Four well-designed games: adding groups of up to 9, subtracting up to 9 from a group of up to 18, measuring lengths using a worm as units, and counting in groups of 10. Allows teacher modification. Clear sounds and graphics aid the content.

Final Rating: 78 ********
User Friendliness: 64 ******
Educational Value: 98 **********
Instructional Design: 77 ********



Title: Astro's ABCs
Company: Alphaphonics
Date: 1984
Price: $175.00
Age: 5-6
Computer: Apple
Conceptual Area: LA/4,5
- Letter recognition skills

Comments: Consists of seven disks, each covering four letters. Lessons follow fixed sequence, showing alphabet, word pictures, and the letter drawn on the screen. Child then finds letter on keyboard and plays a game with the letter symbols. Child cannot control sequence. Offers effective practice with each letter.

Final Rating: 62 ******
User Friendliness: 63 ******
Educational Value: 75 ********
Instructional Design: 54 *****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Astro-Grover
Company: CBS Software
Date: 1984
Price: $29.95
Age: 3-6
Computer: Apple, C64*
Conceptual Area: NB/3,4
- Counting, adding, and subtracting

Final Rating: 41 **
User Friendliness: 45 ***
Educational Value: 44 **
Instructional Design: 36 **

Comments: Consists of five games that provide practice counting, adding, and subtracting objects in an "outer space" context. Lively graphics and sounds not related to content. Includes keyboard overlay. Apple version compatible with Muppet Learning Keys.

Title: Beginner Reader
Company: Scandura Training Systems
Date: 1983
Price: $24.95
Age: 5-7
Computer: Apple
Conceptual Area: LA/7
- Rhyming words

Final Rating: 39 **
User Friendliness: 20 **
Educational Value: 29 *
Instructional Design: 50 ***

Comments: Three activities. Drill 1 — a rhyming activity using a multiple choice format. Drill 2 — child types Y or N if two words rhyme. Drill 3 — child types in rhyming word. Poorly designed program. Not recommended.

Title: Beginning Counting
Company: MicroEd, Inc.
Date: 1987
Price: $39.95
Age: 3-6
Computer: Amiga (512K)
Conceptual Area: NB/3,4,8
- Counting from 1 to 9

Final Rating: 43 **
User Friendliness: 51 ***
Educational Value: 53 ***
Instructional Design: 32 *

Comments: Two disks dealing with numbers 1-9. Child uses the mouse to (1) count objects, (2) identify the names of numbers upon hearing names, and (3) arrange numbers in order. Has several levels of difficulty. Requires mastery of each level to go to the next. Provides spoken feedback in a fairly clear man's voice.

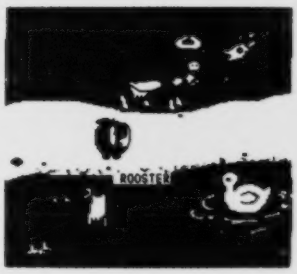
Title: Beginning Reading Skills
Company: MicroEd, Inc.
Date: 1986
Price: $89.95
Age: 3-6
Computer: Amiga (512K)
Conceptual Area: LA/5,6
- Beginning reading skills

Final Rating: 57 ******
User Friendliness: 53 *****
Educational Value: 61 ******
Instructional Design: 57 ******

Comments: A four-disk series that presents (in a man's voice) a sentence, e.g., "A man ran." Each word of the sentence also appears randomly in one of nine boxes. The child identifies, in order, each word in the sentence by clicking the mouse on the appropriate word box. Contains 1000 words, as hard as "delve" and "gauze."

Title: Best Electronic Word Book Ever
Company: Mindscape
Date: 1985
Price: $29.95
Age: 5-up
Computer: Apple*, C64
Conceptual Area: LA/5 CL/2 OT/1
- Reading readiness skills

Final Rating: 70 *******
User Friendliness: 68 *******
Educational Value: 75 ********
Instructional Design: 69 *******



Comments: Using arrow keys or joystick, child moves worm down a road that has objects, e.g., a cow, a barn, scattered along the side. Stopping at an object animates and labels it. Six scenes are available on two disks that contain both Apple and C64 formats. Harder levels ask child to find a specified object.

Title: Big Bird's Funhouse
Company: CBS Software
Date: 1984
Price: $14.95
Age: 3-6
Computer: C64
Conceptual Area: OT/1
- Concentration and memory

Final Rating: 49 *****
User Friendliness: 45 *****
Educational Value: 64 ******
Instructional Design: 43 ****

Comments: Five levels of memory games that use eight muppet characters who move among the windows of a house. Children can play hide-and-seek or other more advanced games. Lots of graphics and music. Uses keyboard overlay (included). No CMI.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Big Bird's Special Delivery
Company: CBS Software
Date: 1984
Price: $34.95
Age: 3-6
Computer: C64* (cartridge), IBM
Conceptual Area: CL/2
- Object recognition

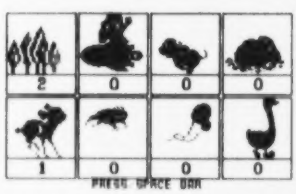
Final Rating: 31 ***
User Friendliness: 43 ****
Educational Value: 34 ***
Instructional Design: 21 **

Comments: Consists of a multiple-choice format in which child uses arrow keys to match one of four pictures according to form (easiest), class, and function (hardest). Menu requires reading. Discontinued in 1986.

Title: Bike Hike
Company: Learning Technologies, Inc.
Date: 1985
Price: $24.95
Age: 4-8
Computer: Apple*, C64
Conceptual Area: OT/1 NB/3
- Memory, recall of objects

Final Rating: 41 ****
User Friendliness: 57 ******
Educational Value: 35 ****
Instructional Design: 32 ***

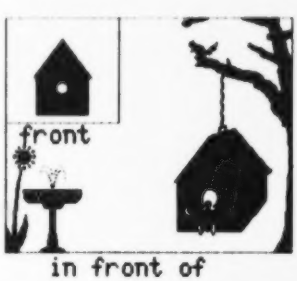
Comments: Child first watches objects pass a bicycle, then uses number keys to select objects from a list shown at the end of the ride. Reading required. Two difficulty levels available. Inflexible design allows little child-control.



Title: Bird's Eye View
Company: Hartley Courseware, Inc.
Date: 1987
Price: $49.95
Age: 5-8
Computer: Apple*, IBM
Conceptual Area: SP/3,4 LA/1
- Perspective and positional relationships

Final Rating: 73 *******
User Friendliness: 73 *******
Educational Value: 98 **********
Instructional Design: 59 ******

Comments: A scene is shown with a bird. Views possibly seen by bird appear in a box. Child uses spacebar to select which view bird sees, based on the bird's location. Other activities allow moving the bird to correspond to a view shown. Management keeps records and allows teacher-control over the presentation.



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Body Awareness
Company: Mindscape, Inc.
Date: 1983
Price: $49.95
Age: 3-6
Computer: Apple
Conceptual Area: SP/5 LA/5
- Location of body parts

Final Rating: 64 ******
User Friendliness: 82 ********
Educational Value: 65 *******
Instructional Design: 50 *****

Comments: Three games on body parts. Child selects Y, N, ?, or ESCAPE for each problem. Provides practice with body part locations, words for parts, and seasonal clothing. Provides performance summary and allows selection for number of rounds, season, and timing of cursor movement. No reading required.

Title: Bouncy Bee Learns Letters 1.0
Company: IBM Educational Systems
Date: 1985
Price: $56.00
Age: 4-8
Computer: IBM
Conceptual Area: LA/4
- Letter recognition

Final Rating: 72 *******
User Friendliness: 42 ****
Educational Value: 97 **********
Instructional Design: 81 ********

Comments: Four games: Game 1 introduces a letter. Games 2-4 provide practice with the letter in a game context using the spacebar and arrows. Management can track up to 225 children and automatically adjusts difficulty. Independent of "Writing to Read." Voice attachment optional.

Title: Bouncy Bee Learns Words 1.0
Company: IBM Educational Systems
Date: 1985
Price: $56.00
Age: 5-10
Computer: IBM
Conceptual Area: LA/5
- Word knowledge

Final Rating: 62 ******
User Friendliness: 44 ****
Educational Value: 87 *********
Instructional Design: 61 ******

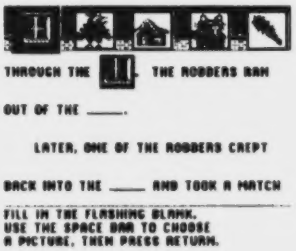
Comments: Four activities using common words in game context. Child uses arrow keys and spacebar to match words with pictures, pick a word from one or more distractors, or identify a word as it is formed by marching ants. Management system can track 150 children. Menu requires reading. Voice synthesizer is optional.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Bremen Town Musicians
Company: Troll Associates
Date: 1987
Price: $39.95
Age: 5-8
Computer: Apple
Conceptual Area: LA/5,7 SP/4
- Homonyms, context clues, comprehension

Comments: Three games: Rebus — child places pictures on blank lines in text of story to complete the tale. Stepping Stones — child moves along a path, selecting homonyms to earn moves, e.g., "Bremen was weigh/way off." Mystery — child solves rebus puzzle. Best for ages 6 and up. Includes book.

Final Rating: 45 *****
User Friendliness: 53 *****
Educational Value: 54 *****
Instructional Design: 35 ****


THROUGH THE
THE ROBBERS RAN
OUT OF THE ____.
LATER, ONE OF THE ROBBERS CREPT
BACK INTO THE ____ AND TOOK A MATCH
FILL IN THE FLASHING BLANK.
USE THE SPACE BAR TO CHOOSE
A PICTURE, THEN PRESS RETURN.

Title: Build a Book About You
Company: Scarborough
Date: 1985
Price: $39.95
Age: 2-12
Computer: Apple
Conceptual Area: LA/5,9 CP/4
- Creating a book

Comments: With adult help, child enters personal information (e.g., name, hometown, favorite toy), which the computer incorporates into one of four available stories. Text can then be printed onto blank picture-book pages and made into a book. Includes two large hardcover book kits. Best for home use.

Final Rating: 68 *******
User Friendliness: 44 ****
Educational Value: 89 *********
Instructional Design: 76 ********

Title: Bumble Games
Company: The Learning Company
Date: 1982
Price: $59.95 (school edition)
Age: 5-10
Computer: Apple
Conceptual Area: NB/1
- Plotting (x,y) points on a grid.

Comments: Five games from easy to hard provide practice for plotting points on grid. Whether or not content is applicable to early childhood is at issue. Menu requires reading. School edition includes curriculum materials.

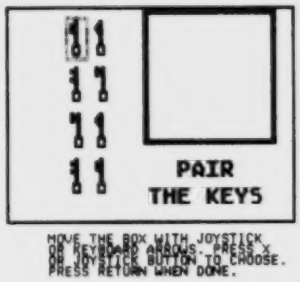
Final Rating: 49 *****
User Friendliness: 55 ******
Educational Value: 50 *****
Instructional Design: 51 *****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Castle Clobber
Company: Mindscape, Inc.
Date: 1985
Price: $29.95
Age: 5-9
Computer: Apple, IBM*, C64, Atari
Conceptual Area: CL/1,2 SP/4,6,7,8 OT/1
- Logical thinking skills

Comments: Child uses joystick or arrow keys to move "Tonk" through a 50-room kingdom to collect objects, play one of five memory or classification games, and try to find a hidden toy chest. Three levels are available. Simple reading required. Children enjoy exploring the rooms.

Final Rating: 56 ******
User Friendliness: 61 ******
Educational Value: 73 *******
Instructional Design: 37 ****



Title: Cat 'n Mouse
Company: MindPlay
Date: 1984
Price: $39.99
Age: 5-12
Computer: Apple*, IBM
Conceptual Area: LA/6
- Relational concepts

Comments: A maze game in which child earns points by moving a mouse (with joystick, mouse, or arrow keys) away from a hungry cat and correctly matching homonyms, antonyms, and picture words. Adult can add own words or change other features of the program.

Final Rating: 65 *******
User Friendliness: 74 *******
Educational Value: 55 ******
Instructional Design: 63 ******

Title: Charlie Brown's 1-2-3's
Company: Random House Software
Date: 1985
Price: $30.00
Age: 3-7
Computer: Apple
Conceptual Area: NB/3,4,8
- Numeral recognition, counting

Comments: Child selects a numeral and then uses spacebar or number keys to count out the number. Correct response makes 1 of 16 animated Peanuts scenes appear. Good sound and graphics. Enjoyable program.

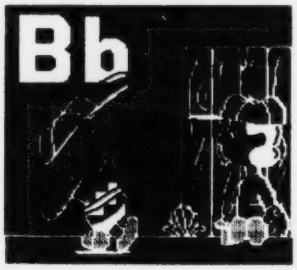
Final Rating: 67 *******
User Friendliness: 60 ******
Educational Value: 78 ********
Instructional Design: 69 *******

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Charlie Brown's ABC's
Company: Random House Software
Date: 1984
Price: $39.95
Age: 3-8
Computer: Apple*, C64, IBM
Conceptual Area: LA/4
- Letter recognition & association

Comments: Child presses any letter to see tutorial screen on the letter (letter and picture). Finding and pressing the letter again on the keyboard animates the picture with Peanuts Gang characters. Disk must be turned over to access entire alphabet. Fun to use. Potential starter program.

Final Rating: 64 ******
User Friendliness: 47 *****
Educational Value: 70 *******
Instructional Design: 71 *******



Title: Color Find
Company: E.C.S.
Date: 1985
Price: $14.95
Age: 2.5-5
Computer: Apple
Conceptual Area: CL/2
- Matching colors

Comments: A simple drill-and-practice program on nine colors. When a color fills the screen, child presses correspondingly colored sticker on the keyboard. (Stickers included.) Responses are recorded. Echo II speech attachment optional to say "press a color."

Final Rating: 69 *******
User Friendliness: 77 ********
Educational Value: 69 *******
Instructional Design: 63 ******

Title: Color Me
Company: Mindscape, Inc.
Date: 1986
Price: $39.95
Age: 3-10
Computer: Apple*, IBM, C64 ($34.95)
Conceptual Area: CP/1,4 LA/3
- Drawing, creating

Comments: Easy-to-use program. Our youngest children could use this program with success. Requires Koala Pad, mouse, or joystick. Child can draw, select colors, or write. Pictures can be printed in color and saved. Includes book, puppet, and picture disk.

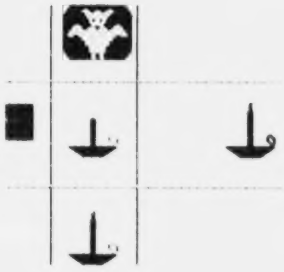
Final Rating: 89 *********
User Friendliness: 88 *********
Educational Value: 91 *********
Instructional Design: 87 *********

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Colors and Shapes
Company: Hartley Courseware, Inc.
Date: 1984
Price: $35.95
Age: 3-6
Computer: Apple
Conceptual Area: CL/1 SE/1
- Color ID, visual discrimination

Comments: Consists of four activities based on matching of shapes and colors. Makes use of picture menus. Options for speed, sound, and three levels of difficulty for each activity, selected by child. Well-designed program.

Final Rating: 76 ********
User Friendliness: 84 ********
Educational Value: 88 *********
Instructional Design: 59 ******



Title: Come Play With Pockets
Company: World Book, Inc.
Date: 1984
Price: $39.95
Age: 3-5
Computer: IBM
Conceptual Area: CL/1,3 SP/1
- Visual memory, tracking skills

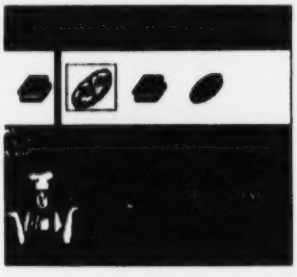
Comments: Six games in which child uses spacebar and RETURN to move blocks, remember a sequence or set, play Simon Says, or find a bucket a ball landed in. No CMI. Good graphics and sounds. Effective menu gives child control.

Final Rating: 66 *******
User Friendliness: 67 *******
Educational Value: 92 *********
Instructional Design: 51 *****

Title: Comparison Kitchen
Company: DLM
Date: 1985
Price: $32.95
Age: 4-8
Computer: Apple*, IBM
Conceptual Area: CL/1,2 SP/8 NB/1
- Compare and categorize pictures

Comments: Six games provide experience matching shapes, colors, and sizes. Child uses spacebar and RETURN to make selections. Menu requires reading. Color monitor recommended.

Final Rating: 72 *******
User Friendliness: 62 ******
Educational Value: 89 *********
Instructional Design: 70 *******

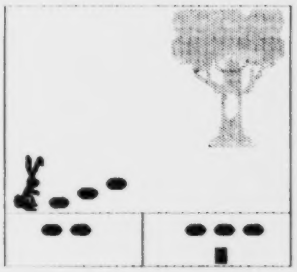


LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Conservation and Counting
Company: Hartley Courseware, Inc.
Date: 1985
Price: $35.95
Age: 3-6
Computer: Apple
Conceptual Area: NB/1,2,3,4
- Counting skills

Comments: Four games in which child uses spacebar and RETURN to match sets of objects, to match numbers with sets, and to estimate quantities, all with numbers less than 10. Three levels to each game. Child can select own level or activity, using picture menus. Limited teacher options.

Final Rating: 71 *******
User Friendliness: 78 ********
Educational Value: 81 ********
Instructional Design: 56 ******



Title: Copycats: ABC for Micro & Me!
Company: Educational Activities
Date: 1984
Price: $39.95
Age: 3-7
Computer: Apple*, C64
Conceptual Area: LA/4
- Matching, alphabet order

Comments: Two activities on one disk: Copycats — child matches three to five random or teacher-picked words by typing the letters and pressing RETURN. ABC — four activities to teach alphabet order. Reading required.

Final Rating: 48 *****
User Friendliness: 39 ****
Educational Value: 56 ******
Instructional Design: 50 *****

Title: Cotton Tales
Company: MindPlay
Date: 1987
Price: $39.95
Age: 4-8
Computer: Apple
Conceptual Area: LA/3,4,5,8,9 CP/4
- Word processing, language development

Comments: Child uses spacebar, arrow keys, RETURN and ESCAPE to manipulate menus to select pictures, select words, or type in own words to create stories. Work can be printed. Library contains 192 pictures and 616 words. Up to 168 additional words can be added. Can be used with a color printer.

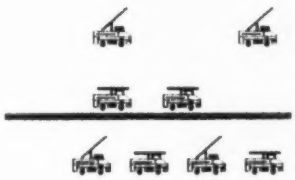
Final Rating: 82 ********
User Friendliness: 69 *******
Educational Value: 88 *********
Instructional Design: 89 *********

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Counters
Company: Sunburst Communications, Inc.
Date: 1983
Price: $65.00
Age: 3-6
Computer: Apple
Conceptual Area: NB/2,3,4
- Counting experiences

Final Rating: 69 *******
User Friendliness: 47 *****
Educational Value: 87 **********
Instructional Design: 77 *********

Comments: Consists of three counting, addition, and subtraction activities, all with numbers less than 10. Child matches sets of objects one at a time using the space-bar or all at once using a number key. Strong content. Adult help required.



Title: Counting
Company: MECC
Date: 1983
Price: $35.00
Age: 3-7
Computer: C64
Conceptual Area: NB/3,4,7 CL/1
- Primary arithmetic skills

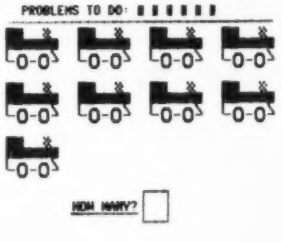
Final Rating: 60 ******
User Friendliness: 60 ******
Educational Value: 69 *******
Instructional Design: 54 *****

Comments: Child uses keyboard in six math games. Smile — counting from 1 to 9. Wuzzle — counting certain objects in a set. Fireworks — illustrated addition problems. Smile More — counting from 10 to 20. Return of the Wuzzle — counting objects selected from a larger set. More Fireworks — addition drill with sums between 10 and 20.

Title: Counting
Company: MicroEd, Inc.
Date: 1984
Price: $10.95
Age: 5-8
Computer: Apple*, C64
Conceptual Area: NB/3
- Counting skills, basic facts

Final Rating: 53 *****
User Friendliness: 43 ****
Educational Value: 68 *******
Instructional Design: 53 *****

Comments: Provides counting, addition, and subtraction practice. Graphics are clearly and simply presented.



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Counting Critters
Company: Mindscape, Inc.
Date: 1987
Price: $39.95
Age: 4-7
Computer: Apple
Conceptual Area: NB/3/4/7
- Counting, addition, and subtraction

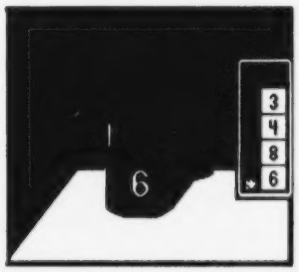
Comments: Three activities. Child uses number keys to count, add, or subtract with the help of animated animal pictures, with sums all less than 12. Keeps scores for up to 20 children.

Final Rating: 62 ******
User Friendliness: 53 ******
Educational Value: 72 ********
Instructional Design: 62 ******

Title: Counting Critters 1.0
Company: MECC
Date: 1985
Price: $55.00
Age: 3-6
Computer: Apple (64K)
Conceptual Area: NB/3,4,7,8 CL/2
- Counting and early math concepts

Comments: Five games on one disk. Child uses arrow keys and number keys to match numerals from 1-20, match sets with numerals, create a set corresponding to a given numeral, and use numerical order to fill in a dot-to-dot design. Clear graphics and sounds support content. Allows teacher modification.

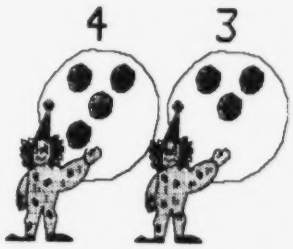
Final Rating: 81 *********
User Friendliness: 68 ********
Educational Value: 99 **********
Instructional Design: 81 *********



Title: Counting Skills
Company: Aquarius People Materials
Date: 1984
Price: $260.00
Age: 3-6
Computer: Apple*, TRS 80
Conceptual Area: NB/2,3,4
- Counting skills

Comments: Contains nine disks covering a range of counting skills. Child needs only to press the spacebar to advance to next frame. Little interaction. Poor design.

Final Rating: 40 ****
User Friendliness: 73 ********
Educational Value: 49 *****
Instructional Design: 18 **



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Country Combo
Company: Micro Power & Light
Date: 1982
Price: $29.95
Age: 3-6
Computer: Apple
Conceptual Area: CL/1,3 CP/4
- Creative experience

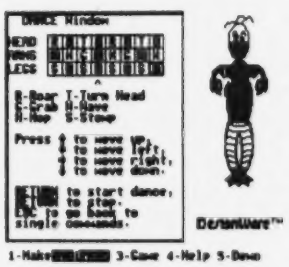
Comments: Offers a 25-square grid in which child can place one of 37 pieces by (1) selecting the piece and (2) typing the numeral of the location on the grid. Game too hard for young children. Reading required. Clumsy design.

Final Rating: 26 ***
User Friendliness: 25 ***
Educational Value: 29 ***
Instructional Design: 24 **

Title: Creature Creator
Company: Designware, Inc.
Date: 1983
Price: $9.95
Age: 4-8
Computer: Apple*, IBM
Conceptual Area: TI/6 LA/10
- Pattern matching, programming

Comments: Child chooses parts of monster and makes it dance, or matches the movements of another monster. Child uses spacebar and RETURN to select monster's parts. Monster's movements can be programmed. Some reading required. Similiar in design to "Facemaker." Will not run on the Apple IIGS.

Final Rating: 62 ******
User Friendliness: 46 *****
Educational Value: 78 ********
Instructional Design: 66 *******



Title: Critter Count
Company: Aquarius
Date: 1982
Price: $39.00
Age: 3-6
Computer: Apple
Conceptual Area: NB/9
- Basic math facts

Comments: Offers a range of addition and subtraction problems in two contexts: one that graphically shows the addends, and one that provides math drill. Pacing is rigid. Child has little control. Not recommended.

Final Rating: 34 ***
User Friendliness: 39 ****
Educational Value: 34 ***
Instructional Design: 28 ***

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Delta Drawing
Company: Spinnaker Software Corp.
Date: 1983
Price: $49.95
Age: 4-up
Computer: Apple, IBM*, C64*
Conceptual Area: SP/4 CP/1,3,4
- Drawing, programming concepts

Final Rating: 78 ********
User Friendliness: 64 ******
Educational Value: 62 ******
Instructional Design: 91 *********

Comments: Offers a creative context in which single commands create pictures, e.g., D to draw, R to turn right. As picture is drawn, each command is stored as program, which can be edited. Pictures can be printed, edited. Similar to LOGO computer language.

Title: Developing Language Skills
Company: Intellectual Software
Date: 1983
Price: $349.95
Age: 3-6
Computer: Apple
Conceptual Area: LA/5
- Vocabulary words

Final Rating: 42 ****
User Friendliness: 55 ******
Educational Value: 33 ***
Instructional Design: 35 ****

Comments: A series of 12 disks and books, each presenting 32 words or phrases from common topics, e.g., toys, food. Using arrow keys and RETURN, child chooses picture to match a word or chooses word to match a picture. Dry presentation. Score (%) kept for each child. Available in Spanish ($795.00).

Title: Dinosaurs
Company: Advanced Ideas, Inc.
Date: 1984
Price: $39.95
Age: 2.5-5
Computer: Apple*, IBM, C64 ($34.95)
Conceptual Area: CL/1,2
- Reading, math, and memory skills

Final Rating: 65 *******
User Friendliness: 77 ********
Educational Value: 72 *******
Instructional Design: 51 *****

Comments: Five games about six dinosaur breeds: matching an outline to its twin; classifying dinosaurs by what they ate, where they lived; and recognizing their written names. Uses a picture menu. Includes stickers and coloring book.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Diskovery Adding Machine
Company: Intellectual Software
Date: 1984
Price: $39.95
Age: 4-8
Computer: Apple
Conceptual Area: NB/1,3,7,9
- Counting, addition skills

Comments: Three games: Counting — child counts and combines two sets. Number Matching — child counts two uneven sets to determine the greater. Adding Facts — child practices addition problems. Some reading required. Management prints and records child's performance.

Final Rating: 69 *******
User Friendliness: 54 *****
Educational Value: 80 ********
Instructional Design: 74 *******

Title: Diskovery Take Away Zoo
Company: Intellectual Software
Date: 1984
Price: $39.95
Age: 4-8
Computer: Apple
Conceptual Area: NB/3,4,9
- Counting, subtraction practice

Comments: Three games on one disk. Child uses arrow keys to remove animals from sets, illustrating subtraction problems. Progresses to traditional subtraction drill, using numbers up to 9. Management prints and records child's performance.

Final Rating: 68 *******
User Friendliness: 52 *****
Educational Value: 82 ********
Instructional Design: 73 *******

Title: Dr. Peet's Talk/Writer
Company: Hartley Courseware, Inc.
Date: 1986
Price: $69.95
Age: 3-7
Computer: Apple
Conceptual Area: LA/3,4,5,6,7,9 CL/2 CP/4
- Language exploration and skills

Comments: Consists of two disks. Disk 1 includes the ABC song, finding and matching letters, and creating and listening to words. Disk 2 is an easy-to-use talking word processor that says whatever is typed, in robotic voice. Uses large letters. Echo or Cricket speech synthesizer required. Stories can be saved and printed.

Final Rating: 79 ********
User Friendliness: 58 ******
Educational Value: 98 **********
Instructional Design: 88 *********

```
My dog likes to
play with me.  I
will throw a stick
or a ball and she
will get it. ■
```

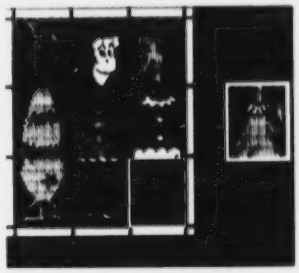
R	S	P	Q

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Dr. Seuss Fix-Up . . . Puzzler
Company: CBS Software
Date: 1985
Price: $29.95
Age: 4-10
Computer: Apple, C64*
Conceptual Area: SP/1
- Problem solving

Comments: A puzzle program featuring six Dr. Seuss characters. Each puzzle is randomly designed with five difficulties to choose from. More advanced levels use smaller and/or inverted pieces. Compatible with Muppet Learning Keys. Available on disk.

Final Rating: 70 *******
User Friendliness: 51 *****
Educational Value: 83 ********
Instructional Design: 79 ********



Title: Ducks Ahoy
Company: CBS Software
Date: 1984
Price: $34.95
Age: 3-6
Computer: C64 (cartridge)
Conceptual Area: TI/3,5
- Logical reasoning skills

Comments: A game in which children move a boat through canals to pick up ducks. Timing and selection of the best route to avoid a moving obstacle are required to collect all the ducks. Entertaining music and graphics. Joystick required. Discontinued in 1986.

Final Rating: 54 *****
User Friendliness: 70 *******
Educational Value: 56 ******
Instructional Design: 43 ****

Title: Early Childhood Learning Program
Company: Educational Activities
Date: 1983
Price: $159.00
Age: 3-7
Computer: Apple*, C64
Conceptual Area: CP/3 SP/1 TI/3
- Conceptual skill development

Comments: A series of five disks, all of which use one-key commands (e.g., F = forward) to move objects. Based on LOGO concepts. Gives open-ended context for exploration in directionality, planning, sequencing, etc. Animation is slow, limiting child's control.

Final Rating: 53 *****
User Friendliness: 36 ****
Educational Value: 56 ******
Instructional Design: 67 *******

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Early Elementary I
Company: Compu-Tations
Date: 1982
Price: $34.95
Age: 4-7
Computer: Apple*, Atari, IBM
Conceptual Area: CL/1 NB/4
- Counting and matching

Comments: Presents four activities: Count Shapes, Color Match, Number Drill, and Shape Match. Contains management file and password system. Uses blocky graphics. Presentation can trap child in routines. Not recommended.

Final Rating: 27 ***
User Friendliness: 26 ***
Educational Value: 23 **
Instructional Design: 40 ****

Title: Early Elementary II
Company: Compu-Tations
Date: 1981
Price: $34.95
Age: 5-7
Computer: Apple
Conceptual Area: LA/4 SP/4 NB/4,8
- Letter recognition, counting

Comments: Contains four games: Upper/Lower-case Match, Alphabet Line, Inside Out, Number Line. Includes management file. No branching. Possible to break the program. Graphics are unclear and sounds are distracting. Not recommended.

Final Rating: 28 ***
User Friendliness: 28 ***
Educational Value: 23 **
Instructional Design: 30 ***

Title: Early Games
Company: Springboard
Date: 1984
Price: $31.95
Age: 2-6
Computer: Apple*, IBM, C64, Atari
Conceptual Area: CP/1 LA/4 CL/1 NB/3,8
- Counting, letters, and drawing

Comments: Contains nine separate games that are strong in content. Poorly designed menu is easy to use but confusing to children. Successful in providing a variety of activities. Drawing activity pictures can be saved on disk.

Final Rating: 60 ******
User Friendliness: 44 ****
Educational Value: 72 *******
Instructional Design: 74 *******

CAN YOU MATCH THIS NUMBER?

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Early Learning Friends
Company: Spinnaker Software Corp.
Date: 1985
Price: $9.95
Age: 4-7
Computer: C64
Conceptual Area: TI/1,3 CL/1,2,5
- Shapes, colors, sizes, and timing

Comments: Child uses joystick in three games: Alf — an enjoyable maze-like game in which child moves Alf through caves, avoiding "Wufflegumps." Shape Shop — child makes toy's missing part, considering the color and shape of the needed part. Coney Island — child moves a penguin to match the attributes of an ice-cream cone.

Final Rating: 71 *******
User Friendliness: 69 *******
Educational Value: 89 *********
Instructional Design: 60 ******

Title: Early Math
Company: MicroEd, Inc.
Date: 1987
Price: $49.95
Age: 3-6
Computer: Amiga (512K)
Conceptual Area: NB/3
- Counting, numerical order, basic skills

Comments: Four programs on one disk: child counts from 1-31 objects and enters the number, completes a three-number sequence, finds the sum of two groups of 0-9 objects, or subtracts with sets of 0-9 objects. Blocky graphics. Provides feedback with a male voice.

Final Rating: 43 ****
User Friendliness: 43 ****
Educational Value: 69 *******
Instructional Design: 41 ****

Title: Early Skills
Company: Hartley Courseware, Inc.
Date: 1986
Price: $39.95
Age: 5-7
Computer: Apple
Conceptual Area: CL/2 SE/4
- Shape and word discrimination

Comments: Child uses spacebar to match objects, colors, or words in this simple, two-disk, matching program. Design permits control over many aspects of the content and includes record keeping and automatic progress report. Menu requires reading.

Final Rating: 61 ******
User Friendliness: 49 *****
Educational Value: 83 ********
Instructional Design: 58 ******

Title: Easy as ABC
Company: Springboard
Date: 1984
Price: $39.95
Age: 3-6
Computer: Apple*, Mac, IBM, C64
Conceptual Area: LA/4,5
- Letter recognition, alphabet order

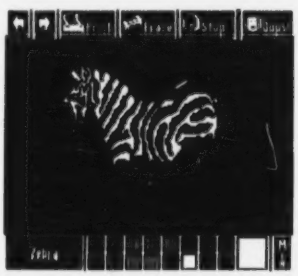
Comments: Provides five games: Match Letters, Dot-to-Dot, Leapfrog, Lunar Letters, and Honey Hunt. Spacebar, JKIM keys, arrow keys, and joystick make the program easy to use. Can be used with upper- and lower-case letters. Reading not required.

Final Rating: 82 ********
User Friendliness: 84 ********
Educational Value: 90 *********
Instructional Design: 70 *******

Title: Electronic Crayon Series
Company: Polarware/Penguin Software
Date: 1986
Price: $14.95
Age: 3-13
Computer: Apple* (128K), IBM, C64
Conceptual Area: LA/4 CP/4
- Computer coloring

Comments: A computer coloring program with 30 blank pictures per disk. Child moves cursor with mouse, joystick, or arrow keys to fill in sections of a picture with one of 16 available colors. Prints in color. Mouse and color monitor recommended. Very easy to use. Prints a calendar with the picture.

Final Rating: 74 *******
User Friendliness: 83 ********
Educational Value: 67 *******
Instructional Design: 70 *******



Title: Ernie's Big Splash
Company: CBS Software
Date: 1985
Price: $14.95
Age: 4-6
Computer: C64
Conceptual Area: SP/4,7
- Planning, predicting, problem solving

Comments: Using function keys, child builds path that transports Rubber Duckie from his soap dish to Ernie's bathtub. The path is made by choosing squares that will move Duckie to Ernie. Three levels. Program takes three minutes to load from disk. Limited content.

Final Rating: 59 ******
User Friendliness: 51 *****
Educational Value: 63 ******
Instructional Design: 60 ******

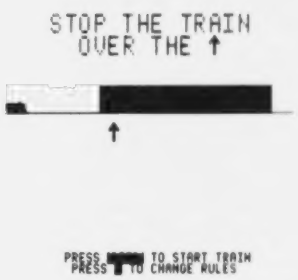
Title: Ernie's Magic Shapes
Company: CBS Software
Date: 1984
Price: $19.95
Age: 3-6
Computer: C64*, Atari, IBM
Conceptual Area: CL/1,2
- Visual discrimination practice

Final Rating: 45 *****
User Friendliness: 43 ****
Educational Value: 61 ******
Instructional Design: 37 ****

Comments: In all of the six shape- and color-matching games, child uses two arrow keys to decide if a shape or color matches one shown. Features Ernie, who nods feedback and brings new shapes. Provides little interaction or variety. Color monitor required.

Title: Estimation
Company: Lawrence Hall of Science
Date: 1984
Price: $34.95
Age: 4-6
Computer: Apple
Conceptual Area: TI/1,3,4 NB/5,6
- Est. of length, area, & time units

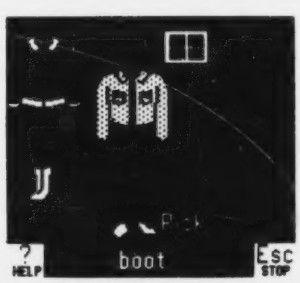
Final Rating: 64 ******
User Friendliness: 57 ******
Educational Value: 87 *********
Instructional Design: 58 ******



Comments: Offers three activities with estimation skills: Choo-Choo — child guesses when a train is over an arrow by pressing spacebar. Junk Jar — child estimates area. Bugs — presents units of "bugs" for child to estimate a line's length. Simple reading required.

Title: Expl. Your World: The Weather
Company: Grolier Electronic Publishing
Date: 1985
Price: $24.95
Age: 4-7
Computer: Apple*, C64
Conceptual Area: LA/5 SP/2,4,5
- Body parts, weather words

Final Rating: 51 *****
User Friendliness: 46 *****
Educational Value: 75 ********
Instructional Design: 43 ****



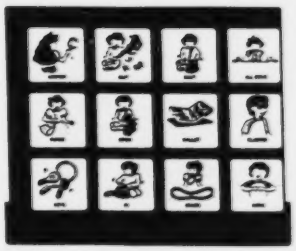
Comments: Two activities on one disk: (1) An open activity. Child uses joystick or arrow keys to pick a weather picture (e.g., sun, rain) and moves it to a scene. (2) Child dresses man or woman figure by selecting clothes and moving them to the appropriate body part. Menu requires reading.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Exploratory Play
Company: P.E.A.L. Software
Date: 1985
Price: $150.00
Age: 1.5-3
Computer: Apple (64K)
Conceptual Area: LA/1,5 SP/7
- Early language acquisition

Comments: Provides two overlays for the Muppet Learning Keys (required). Child first plays with real toys, then presses their pictures on the overlay to hear the associated words in a robotic voice. (Toy kit purchased separately for $54.) Requires Echo or Cricket synthesizer. Covers 24 words. Adult setup required.

Final Rating: 71 *******
User Friendliness: 62 ******
Educational Value: 69 *******
Instructional Design: 84 ********



Title: Explore-a-Story: A Great Leap
Company: D.C. Heath & Company
Date: 1988
Price: $75.00
Age: 5-10
Computer: Apple (128K)
Conceptual Area: LA/1,2,3,5,8,9 SP/4,7 CP/1,4
- Language experience

Comments: Children use mouse, Koala Pad, joystick, or arrow keys to select and move objects, words, or characters in a story. Children can also type their own words. Stories can be saved and printed in color. Package includes four storybooks. Colorful graphics, good child-control. Mouse recommended.

Final Rating: 90 *********
User Friendliness: 85 *********
Educational Value: 91 *********
Instructional Design: 86 *********

Title: Extrateletactograph, The
Company: DIL International
Date: 1986
Price: $69.95
Age: 4-12
Computer: Apple II + or IIe (not IIc)
Conceptual Area: CP/1,4 LA/3
- Drawing and writing stories

Comments: A drawing and writing program. Child touches graphic tablet with overlay (requires WonderWorker) to draw or to change colors. Text can be added to the picture. Work can be saved and printed. Includes supplementary materials.

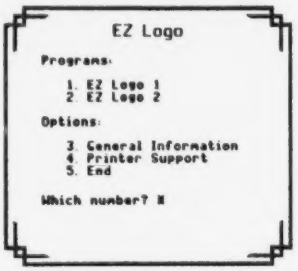
Final Rating: 73 *******
User Friendliness: 67 *******
Educational Value: 80 ********
Instructional Design: 72 *******

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: EZ Logo
Company: MECC
Date: 1985
Price: $55.00
Age: 4-8
Computer: Apple (64K)
Conceptual Area: CP/1,3 SP/4,1,7,8 NB/1,3,5
- Problem solving, directionality

Comments: Two levels on one disk. In level 1, child can draw using one-letter commands (e.g., F = Forward). 17 commands available. In level 2, child can create simple procedures and incorporate them into pictures. Five colors available. Work can be saved and printed. Manual includes many ideas and two keyboard sticker sets.

Final Rating: 74 *******
User Friendliness: 45 *****
Educational Value: 94 *********
Instructional Design: 89 *********



Title: Facemaker
Company: Spinnaker Software Corp.
Date: 1982
Price: $29.95
Age: 3-8
Computer: Apple, IBM*, C64, Atari
Conceptual Area: CP/2,3,4 TI/6
- Pattern matching, creative activity

Comments: Children use spacebar and RETURN to select elements of a face: eyes, ears nose, mouth, hair. The face can then be made to wink, cry, etc., and a sequence activity can be done (like Simon Says). Simple reading required. Discontinued in 1986. See Facemaker Golden Edition.

Final Rating: 54 *****
User Friendliness: 41 ****
Educational Value: 58 ******
Instructional Design: 63 ******

Title: Facemaker Golden Edition
Company: Spinnaker Software Corp.
Date: 1986
Price: $39.95
Age: 3-8
Computer: Apple*, Amiga ($49.95)
Conceptual Area: SP/5 CP/3,4 LA/4,9 OT/1
- Creativity, memory, and concentration

Comments: Child uses spacebar to select features for a face (eyes, ears, nose, mouth, hair) as well as a body, hats, or glasses. Face can then be programmed to move or be used in a memory game. It can then be printed along with up to ½ page of text. Difficult for 3-year-olds to operate.

Final Rating: 61 ******
User Friendliness: 43 ****
Educational Value: 77 ********
Instructional Design: 66 *******

Title: Fantastic Animals
Company: Firebird Licensees Inc.
Date: 1985
Price: $9.99
Age: 4-9
Computer: Apple*, IBM, C64 ($7.99)
Conceptual Area: SP/1,5 CL/2
- Part/whole relationships

Comments: Three games use parts of 20 animals. Child uses spacebar and RETURN to create an animal from the mixed parts of many or to make a matching animal when shown a model. Each animal has a song. Enjoyable program.

Final Rating: 70 *******
User Friendliness: 63 ******
Educational Value: 78 ********
Instructional Design: 72 *******

Title: First Encounters
Company: Educational Activities
Date: 1983
Price: $98.00
Age: 4-6
Computer: Apple
Conceptual Area: OT/1
- Computer literacy skills

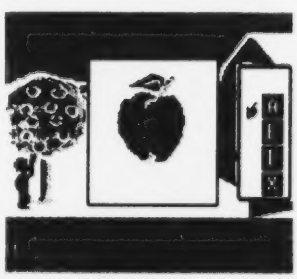
Comments: A "computer literacy" package designed to teach kindergarten children computer terms, computer operation, and writing of programs. Includes flashcards for memorizing terms, worksheets, keyboard models, workdisk with games. Reading required. Ratings apply only to programs.

Final Rating: 32 ***
User Friendliness: 41 ****
Educational Value: 21 **
Instructional Design: 29 ***

Title: First Letter Fun
Company: MECC
Date: 1985
Price: $55.99
Age: 3-6
Computer: Apple (64K)
Conceptual Area: LA/1,4,6
- Letter recognition

Comments: Four pictures stories: Farm, Circus, Park, and Magic Show introduce all the letters except Q and X. Child sees an object from a story and must use the spacebar or arrow keys to select its initial letter. Teacher options allow selection of upper/lower-case display. Clear graphics. Good design.

Final Rating: 82 ********
User Friendliness: 67 *******
Educational Value: 98 **********
Instructional Design: 86 *********



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: First Letters and Words
Company: First Byte, Inc.
Date: 1987
Price: $49.95
Age: 3-8
Computer: Apple IIGS*, Mac, Amiga, Atari ST
Conceptual Area: LA/4,5,8 SP/5
- Letters & words, dinosaurs

Final Rating: 74 *******
User Friendliness: 80 ********
Educational Value: 80 ********
Instructional Design: 62 ******

Comments: Four games: (1) Introduces upper- and lower-case letters. (2) Shows a picture and says word when any letter is typed. (3) Says body parts as a child colors in a dinosaur. (4) Presents animal riddles for which child types the answer. Talks in a primitive, male voice. Options give teacher control.

Title: First Numbers: First Words
Company: Educational Activities
Date: 1984
Price: $39.95
Age: 3-7
Computer: Apple*, C64
Conceptual Area: LA/4 NB/2,3 OT/1
- 1-to-1 correspondence, visual memory

Final Rating: 41 ****
User Friendliness: 39 ****
Educational Value: 67 *******
Instructional Design: 38 ****

Comments: Two activities on one disk: First Numbers — matching sets 1-5, 1-10. Child sees five dots and duplicates set. Child sees set and types numeral. First Words — child copies model word, e.g., "cat." Harder level requires remembering the word after it has been flashed for two seconds.

Title: First Shapes
Company: First Byte, Inc.
Date: 1987
Price: $49.95
Age: 3-8
Computer: Apple IIGS*, Mac, Amiga, Atari ST
Conceptual Area: CL/1 SP/8 SE/1 OT/1
- Five basic shapes

Final Rating: 78 ********
User Friendliness: 82 ********
Educational Value: 88 *********
Instructional Design: 68 *******

Comments: Four games: Child can (1) change the size of a shape by clicking the mouse, (2) design a toy out of shapes, (3) play Concentration by matching pairs of shapes, or (4) find a shape such as "the smallest circle" among three shapes presented. Gives design options. Toys can be printed and saved. Voice is hard to understand.

Title: First Steps to Reading
Company: Grolier Electronic Publishing
Date: 1985
Price: $49.95
Age: 4-7
Computer: Apple*, C64
Conceptual Area: LA/6
- Initial consonants

Final Rating: 43 ****
User Friendliness: 49 *****
Educational Value: 55 ******
Instructional Design: 31 ***

Comments: Three activities on one disk: (1) Shows object. Child presses the first letter of object shown. (2) Shows letter. Child uses spacebar to select a corresponding object. (3) Shows letter and six objects. Child uses arrow keys to move a crane to the object corresponding to letter. Joystick is optional.

Title: Fish Scales
Company: DLM
Date: 1985
Price: $32.95
Age: 4-8
Computer: Apple
Conceptual Area: NB/1,3,4,6
- Measurement

Final Rating: 71 *******
User Friendliness: 57 ******
Educational Value: 96 **********
Instructional Design: 68 *******

Comments: Six games in which child uses spacebar, arrow keys, or RETURN to input answers, e.g., the height of a fish jump, the longest or shortest fish, and other measurement concepts. Games encourage using units of measurement. Menu requires reading.

Title: Floppy: Letters & Numerals
Company: Floppy Enterprises
Date: 1983
Price: $25.00
Age: 3-6
Computer: Apple
Conceptual Area: LA/4
- Letter recognition

Final Rating: 46 *****
User Friendliness: 36 ****
Educational Value: 50 *****
Instructional Design: 52 *****

Comments: Provides a workbook-like presentation of upper- and lower-case letters. Cursor is moved with GHYB keys and spacebar. Effective practice for upper- and lower-case.

Title: Floppy: Match-ups in Mazes
Company: Floppy Enterprises
Date: 1984
Price: $25.00
Age: 3-6
Computer: Apple
Conceptual Area: LA/4 NB/4
- Letter recognition, numerical order

Comments: Uses simple maze context to match objects with letters or other associated symbols. No branching. Menu requires reading. Results of the previous lesson are available.

Final Rating: 53 *****
User Friendliness: 46 *****
Educational Value: 49 *****
Instructional Design: 73 *******

Title: Floppy: Printing Practice
Company: Floppy Enterprises
Date: 1983
Price: $34.95
Age: 4-6
Computer: Apple
Conceptual Area: LA/5
- Letter and numeral formation

Comments: Child presses a key on the keyboard to cause the letter or numeral to be slowly drawn on the screen. Child then practices drawing the symbol on a piece of paper, using the computer as a model.

Final Rating: 50 *****
User Friendliness: 39 ****
Educational Value: 58 ******
Instructional Design: 66 *******

Title: Floppy: Same and Different
Company: Floppy Enterprises
Date: 1983
Price: $34.95
Age: 4-6
Computer: Apple
Conceptual Area: CL/2
- Visual discrimination

Comments: A workbook presentation of discrimination in three games: different shapes, same shapes with slight differences, and letters. Child presses O or W key to indicate same or different.

Final Rating: 41 ****
User Friendliness: 38 ****
Educational Value: 48 *****
Instructional Design: 38 ****

Title: Floppy: What Is Missing
Company: Floppy Enterprises
Date: 1983
Price: $25.00
Age: 3-6
Computer: Apple
Conceptual Area: SP/5,7
- Parts and wholes, body parts

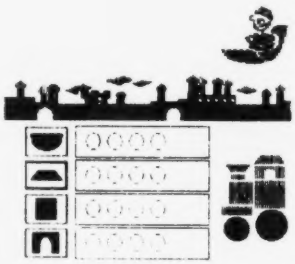
Comments: Presents picture, then picture with one part missing. Child presses 1 or 0 key to select missing piece. Twenty-five problems for each of three pictures: a house, a car, and a man.

Final Rating: 62 ******
User Friendliness: 61 ******
Educational Value: 76 ********
Instructional Design: 55 ******

Title: Flying Carpet, The
Company: Learning Technologies, Inc.
Date: 1985
Price: $24.95
Age: 4-8
Computer: Apple*, C64
Conceptual Area: SP/8
- Shape recognition

Comments: Child uses spacebar and RETURN to count the number of a given shape contained in one of 12 sets of shapes presented. A flying genie provides feedback. No branching. No reading required. Rigid format permits little child-control.

Final Rating: 44 ****
User Friendliness: 65 ********
Educational Value: 52 *****
Instructional Design: 28 ***



Title: Fruit Tree/Gumball
Company: BeCi Software
Date: 1983
Price: $19.95
Age: 2-6
Computer: C64*, VIC 20
Conceptual Area: NB/3,4
- Counting, adding, and subtracting

Comments: Two activities on same disk: Gumball — child counts from 10 to 35 gumballs and enters number. Fruit Tree — child solves addition and subtraction problems. Blocky graphics. Poor design.

Final Rating: 28 ***
User Friendliness: 29 ***
Educational Value: 38 ****
Instructional Design: 22 **

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Fun From A to Z
Company: MECC
Date: 1985
Price: $55.00
Age: 3-6
Computer: Apple (64K)
Conceptual Area: LA/4
- Alphabet skills practice

Final Rating: 81 ********
User Friendliness: 68 ********
Educational Value: 92 **********
Instructional Design: 85 **********

Comments: Child uses arrow keys to play three games: Birds — child matches letters. Dots — child completes a dot-to-dot picture by selecting next alphabet letter. Runners — child sees sequence (K,L,M,__,O) and must select missing letter. Management allows selection of upper/lower-case. Well-designed.

Title: Fun With Directions
Company: Mindscape, Inc.
Date: 1984
Price: $49.95
Age: 3-6
Computer: Apple
Conceptual Area: SP/4 TI/6
- Perceptual and cognitive skills

Final Rating: 62 ******
User Friendliness: 81 *********
Educational Value: 69 ********
Instructional Design: 44 ****

Comments: Child selects a nodding (yes) or shaking (no) head to indicate if objects are in line, are facing same direction, or are in sequence, e.g., egg/chick/chicken. Allows for selection of difficulty level, performance feedback. No reading required.

Title: Fun With Letters and Words
Company: Wescott Software
Date: 1987
Price: $20.00
Age: 2-6
Computer: IBM
Conceptual Area: LA/4,5
- Letter recognition

Final Rating: 76 *********
User Friendliness: 73 ********
Educational Value: 86 **********
Instructional Design: 70 ********

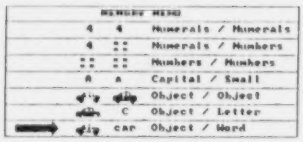
Comments: Child can press any letter key to see a picture and word related to the letter, e.g., a bike for B. Six levels allow the addition of more words, with up to 147 possible. "Custom" words, such as a child's name, can be added.

bike

Title: Fun With Memory
Company: Wescott Software
Date: 1987
Price: $20.00
Age: 2-6
Computer: IBM
Conceptual Area: OT/1 LA/4,5 NB/4 CL/2
- Memory

Final Rating: 77 ********
User Friendliness: 65 *******
Educational Value: 87 *********
Instructional Design: 83 ********

Comments: A seven-level Concentration game in which child uses the arrow keys, spacebar and ENTER to select a card. Child can match numerals, objects, or words. Options allow for control over the number of cards shown in a game. Can be played by one or two players.



Title: Fun With Numbers
Company: Wescott Software
Date: 1987
Price: $20.00
Age: 2-6
Computer: IBM
Conceptual Area: NB/3,4,8
- Numeral recognition, adding and subtracting

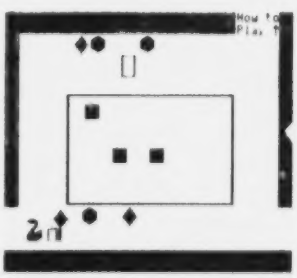
Final Rating: 59 ******
User Friendliness: 64 ******
Educational Value: 78 ********
Instructional Design: 46 *****

Comments: Five games provide experiences in counting, adding with objects, or subtracting, all with sums less than 18. Nine skill levels determine the difficulty of the game. Adult options permit control over the difficulty level and pacing of the game.

Title: Gertrude's Secrets
Company: The Learning Company
Date: 1982
Price: $59.95 (school edition)
Age: 4-10
Computer: Apple*, IBM*, C64 ($29.95)
Conceptual Area: CL/1,5 SP/4
- Classifying and seriating

Final Rating: 84 ********
User Friendliness: 78 ********
Educational Value: 91 *********
Instructional Design: 86 *********

Comments: Consists of seven attribute puzzles of varying difficulty. Child uses arrow keys or joystick to move through 25 rooms (screens). Children as young as age 3 can do easiest puzzle, but lose interest quickly. Content is best for ages 5 and up. School edition contains additional curriculum materials.



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Getting Ready to Read and Add
Company: Sunburst Communications, Inc.
Date: 1984
Price: $65.00
Age: 3-6
Computer: Apple, IBM*, Atari, C64*
Conceptual Area: LA/4 CL/2 NB/3,4
- Numerals, U/L-case letters

Comments: Six activities based on a matching format. Practice with shapes, letters, and numerals. Child presses any key when a match is shown for shapes, letters, and numerals. Options included for control of speed and number of problems.

Final Rating: 63 ******
User Friendliness: 56 ******
Educational Value: 77 ********
Instructional Design: 80 ********

Title: Grabbit Factory, The
Company: D.C. Heath & Company
Date: 1983
Price: $60.00
Age: 3-8
Computer: Apple
Conceptual Area: NB/4,9
- Numerals, basic math facts

Comments: Child uses arrow keys, joystick, to move crane and make selections of numerals. No branching. Easy to use. No reading required.

Final Rating: 52 *****
User Friendliness: 81 ********
Educational Value: 46 *****
Instructional Design: 31 ***

Title: Grandma's House
Company: Spinnaker Software Corp.
Date: 1983
Price: $29.95
Age: 4-8
Computer: Apple*, C64, Atari
Conceptual Area: SP/2
- Exploring and arranging

Comments: Child uses mouse or joystick (required) to move to and explore one of six different scenes. By pressing key, objects can be carried from scenes and collected in "Grandma's House," e.g., a fish from the seashore. Easy to use but not strong in any content area.

Final Rating: 68 *******
User Friendliness: 78 ********
Educational Value: 57 ******
Instructional Design: 65 *******

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Grover's Animal Adventures
Company: CBS Software
Date: 1985
Price: $14.95
Age: 4-6
Computer: C64
Conceptual Area: CL/2
- Classifying animals

Comments: Child uses joystick to move Grover to one of four environments. Pressing joystick button adds animals or objects. Each environment is divided into land, sky, and water areas. Child must place animal in appropriate area.

Final Rating: 76 ********
User Friendliness: 75 ********
Educational Value: 73 *******
Instructional Design: 79 ********

Title: Grownup and Small
Company: Mindscape, Inc.
Date: 1987
Price: $39.95
Age: 3-8
Computer: Apple
Conceptual Area: SE/1 CL/2 LA/4
- Adult and baby names

Comments: Shows adult (or baby) with its name. Child presses spacebar to see the corresponding baby (or adult), which starts an animated sequence. A second activity shows an adult or baby along with four names. Child must select (with spacebar) the corresponding name. Easy to use. Includes 20 matching sets.

Final Rating: 68 *******
User Friendliness: 77 ********
Educational Value: 76 ********
Instructional Design: 55 ******

Title: Happy Birthday, Pockets
Company: World Book, Inc.
Date: 1984
Price: $39.95
Age: 3-5
Computer: IBM
Conceptual Area: CL/2
- Visual discrimination

Comments: Eight child-controlled options in which child uses spacebar and RETURN to select upper- or lower-case letters, numerals, or the letter keys to design the wrapping for a present. Is successful in providing child-control. Good graphics, sound, and content.

Final Rating: 71 *******
User Friendliness: 69 *******
Educational Value: 86 *********
Instructional Design: 63 ******

Title: Hodge Podge
Company: Artworx
Date: 1982
Price: $14.95
Age: 1.5-6
Computer: Apple*, C64, IBM, Atari
Conceptual Area: LA/4
- Letter recognition

Final Rating: 51 *****
User Friendliness: 75 ********
Educational Value: 55 ******
Instructional Design: 50 *****

Comments: Child presses any key to get a response: a picture, a song, or both. Screen displays are blocky and not always appropriate for the letter pressed, e.g., S = Spectra. Easy to use program, but its value is limited.

PRISM

Title: How to Weigh an Elephant
Company: Learning Technologies, Inc.
Date: 1985
Price: $24.95
Age: 4-8
Computer: Apple*, C64
Conceptual Area: NB/1 CP/3
- Estimation of weight.

Final Rating: 42 ****
User Friendliness: 49 *****
Educational Value: 59 ******
Instructional Design: 27 ***

Comments: Three activities in which a child observes how far a boat sinks to select the heaviest animal, guesses which juice glass has the most, or programs a dancer, using the number keys and RETURN. Reading required.

Title: I Can Count
Company: Troll Associates
Date: 1987
Price: $39.95
Age: 5-8
Computer: Apple
Conceptual Area: NB/2,3,4,8
- Counting up to 10

Final Rating: 40 ****
User Friendliness: 53 *****
Educational Value: 45 *****
Instructional Design: 26 ***

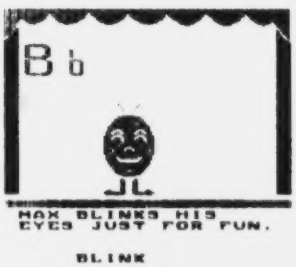
Comments: Eight activities based around counting, matching numbers with sets, typing the number that comes next, finding a missing number in a sequence, recognizing zero, and concepts of greater or less than. Colorful graphics but poor design. Reading is required.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: I Love My Alphabet
Company: First Star Software
Date: 1984
Price: $34.95
Age: 2-7
Computer: Apple*, C64, Atari
Conceptual Area: LA/4
- Letters, alphabetical order

Comments: Entertaining program presents "Max" with four activities of differing difficulty. Well-programmed. Good sounds and graphics. Letter associations are limited and design requires adult or reader help.

Final Rating: 59 ******
User Friendliness: 51 *****
Educational Value: 80 ********
Instructional Design: 55 ******



Title: Introduction to Counting
Company: EduWare
Date: 1981
Price: $39.95
Age: 4-7
Computer: Apple*, IBM, Atari
Conceptual Area: NB/3 CL/1 SE/1
- Counting

Comments: A regimented sequence of eight counting activities. Begins with selecting a set to correspond with a given number and progresses all the way to subtraction. Management keeps score and controls presentation, which allows individualization. Requires adult setup with each use.

Final Rating: 66 *******
User Friendliness: 60 ******
Educational Value: 90 **********
Instructional Design: 53 *****

Title: It's No Game
Company: Educational Activities
Date: 1986
Price: $49.95
Age: 5-11
Computer: Apple
Conceptual Area: LA/2,3
- Personal safety skills

Comments: A simulation where the child is put in a potentially dangerous situation and must make a choice. Each "wise decision" is rewarded with moves on a gameboard. Topics are trusting one's own feelings, saying no to bribes, telephone skills, dealing with strange adults, and asking for help. Reading required.

Final Rating: 62 ******
User Friendliness: 58 ******
Educational Value: 67 *******
Instructional Design: 61 ******

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Jack and the Beanstalk
Company: HRM Software
Date: 1985
Price: $49.00
Age: 7-12
Computer: Apple
Conceptual Area: LA/5,8 TI/5
- Word recognition, event sequence

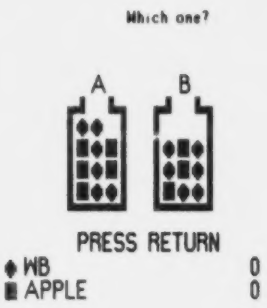
Comments: Children explore their own version of traditional folk tale by playing the role of Jack, making decisions by selecting two-word commands, e.g., "trade cow." Reading required. Could be used as language experience with younger children. A Spanish version is available. Available in a ten-disk package for $147.00.

Final Rating: 69 *******
User Friendliness: 70 *******
Educational Value: 71 *******
Instructional Design: 66 *******

Title: Jar Game & Chaos, The
Company: Milliken Publishing Co.
Date: 1982
Price: $39.95
Age: 5-12
Computer: Apple*, Atari
Conceptual Area: CL/2,5 NB/5
- Probability, discrimination

Comments: Offers two games: Jar Game — by pressing 1 or 2, child chooses candy jar with best chance of having certain-shaped pieces of candy. Chaos — an attribute game in which child presses IJKM keys to match an attribute (shape or color). Easy reading required. Discontinued in 1986.

Final Rating: 42 ****
User Friendliness: 35 ****
Educational Value: 63 ******
Instructional Design: 36 ****



Title: Jr. Typer
Company: Aquarius People Materials
Date: 1985
Price: $45.00
Age: 5-up
Computer: Apple*, TRS 80
Conceptual Area: LA/4 OT/3
- Touch typing

Comments: Presents a fixed series of typing problems. As a child types, graphics or words accumulate on the screen. Helpful graphic hands point out finger positions. Contains 54 combinations on two disks. Inflexible design allows little child-control.

Final Rating: 41 ****
User Friendliness: 33 ***
Educational Value: 49 *****
Instructional Design: 44 ****

Title: Juggle's Rainbow
Company: The Learning Company
Date: 1982
Price: $29.95
Age: 3-6
Computer: Apple, IBM*, C64
Conceptual Area: SP/4
- Spatial relationships

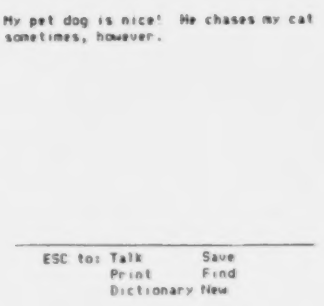
Comments: Keyboard is a plane on which location of keys corresponds to spatial answers, e.g., above, right, below. However, pressing spacebar advances program to next segment, which children often unwittingly do. Discontinued in 1987.

Final Rating: 62 ******
User Friendliness: 65 *******
Educational Value: 74 *******
Instructional Design: 54 *****

Title: Keytalk
Company: P.E.A.L. Software
Date: 1987
Price: $99.00
Age: 3-8
Computer: Apple (64K)
Conceptual Area: LA/3,4,5,9 CP/4
- A beginning literacy activity

Comments: A talking word processor that says in a robotic voice anything that is typed. Uses regular or Muppet keyboard. Says each letter word, and sentence. Allows stories up to one page in 40-column text. Stories can be printed and saved. Includes on-screen word list. Pronunciation exceptions can be added.

Final Rating: 84 ********
User Friendliness: 58 ******
Educational Value: 92 *********
Instructional Design: 96 **********



Title: Kid's Stuff
Company: Stone & Associates
Date: 1984
Price: $39.95
Age: 3-8
Computer: IBM*, Apple, Atari ST
Conceptual Area: LA/4,5 SE/4,5
- Counting skills, letter recognition

Comments: Offers three activities accessible by easy-to-use picture menu. In the letter recognition activity, child types in letters of a word, which creates animation and sounds. An entertaining program that provides options for the child.

Final Rating: 76 ********
User Friendliness: 64 ******
Educational Value: 86 *********
Instructional Design: 80 ********

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Kids on Keys
Company: Spinnaker Software Corp.
Date: 1983
Price: $29.95
Age: 4-9
Computer: Apple*, IBM, C64 ($20.95), Atari
Conceptual Area: LA/4 CL/1 OT/3
- Letter recognition

Comments: Presents three games in which letters, pictures, or words rain down the screen. Child stops them and scores points by typing in the appropriate letter or word. Three levels of difficulty. Good keyboard practice, but requires skills that few three- or four-year-olds have.

Final Rating: 62 ******
User Friendliness: 38 ****
Educational Value: 63 ******
Instructional Design: 79 ********

Title: Kidwriter
Company: Spinnaker Software Corp.
Date: 1984
Price: $29.95
Age: 6-10
Computer: Apple*, C64*, IBM
Conceptual Area: LA/9 CP/4
- Creating computer storybooks

Comments: Child creates picture, selecting from 100 objects that can be moved and changed in size or color. Text can be typed on the lower third of the screen. Stories can be saved on disk and have several pages. Reading required. Good design.

Final Rating: 73 *******
User Friendliness: 48 *****
Educational Value: 97 **********
Instructional Design: 81 ********

Title: Kinder Koncepts MATH
Company: Midwest Software
Date: 1985
Price: $55.00
Age: 4-7
Computer: Apple*, C64, PET
Conceptual Area: NB/1,2,3,4,5,6,7,8
- Number and math skills

Comments: Fifteen well-designed math games cover various number concepts, e.g., estimating length, using units of measurement, counting, numeral recognition. All games follow same drill-and-practice format. Menu designed for adults, which limits child-control.

Final Rating: 57 ******
User Friendliness: 46 *****
Educational Value: 93 *********
Instructional Design: 44 ****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Kindercomp
Company: Spinnaker Software Corp.
Date: 1982
Price: $29.95
Age: 3-8
Computer: Apple, IBM*, C64, Atari
Conceptual Area: CP/1 CL/2 LA/4
- Matching, U/L-case practice, drawing

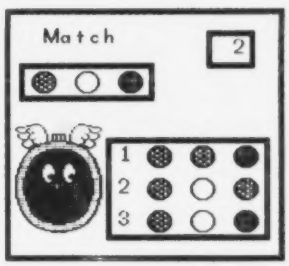
Comments: Offers six games of varying difficulty, including a simple drawing (move cursor with arrow keys) and matching activity that increases in difficulty as child improves. Offers variety of content, which lengthens the life of the program. Menu requires reading.

Final Rating: 68 *******
User Friendliness: 77 ********
Educational Value: 72 *******
Instructional Design: 83 ********

Title: Kindercomp Golden Edition
Company: Spinnaker Software Corp.
Date: 1986
Price: $39.95
Age: 3-7
Computer: Apple*, IBM
Conceptual Area: NB/3 LA/4 CL/2 CP/1
- Counting, letters, matching, and drawing

Comments: Eight activities: Draw, Name, Match, Letters, Alphabet, Count, Sequence, and Add. Provides practice with the alphabet, upper- and lower-case letters, counting (as high as 30), number sequence, counting by twos, threes, etc., and addition (sums up to 18). Offers good range in content and level of challenge.

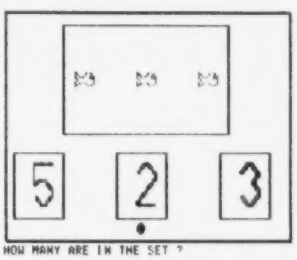
Final Rating: 70 *******
User Friendliness: 56 ******
Educational Value: 90 **********
Instructional Design: 70 *******



Title: Kindermath II
Company: Houghton Mifflin
Date: 1988
Price: $276.00
Age: 4-7
Computer: Apple (64K)
Conceptual Area: NB/1,2,3,4,5,8 CL/2 SP/8
- Math fundamentals

Comments: Ten disks cover 90 separate objectives, starting with "same" and "different" and ending with addition and subtraction problems with sums less than 10. Child uses joystick (required) to move cursor to correct answer. Keeps records. Requires adult setup. Requires Echo synthesizer. Dry presentation.

Final Rating: 57 ******
User Friendliness: 65 *******
Educational Value: 70 *******
Instructional Design: 45 *****



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Knowing Numbers
Company: Mindscape, Inc.
Date: 1983
Price: $49.95
Age: 3-6
Computer: Apple
Conceptual Area: NB/1,3,7
- Fundamental math skill practice

Final Rating: 67 *******
User Friendliness: 79 ********
Educational Value: 77 ********
Instructional Design: 53 *****

Comments: Presents counting, addition, and subtraction activities. Child uses nodding or shaking heads to decide (1) if a group matches a numeral, (2) which group has "more," and (3) if the sum of two groups equals a third. No reading. Some management.

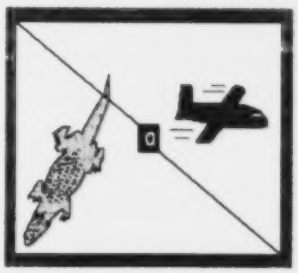
Title: Koala Pad Graphics Exhibitor
Company: PTI/Koala Industries
Date: 1983
Price: $139.50
Age: 5-up
Computer: Apple IIe*, II+, IBM
Conceptual Area: CP/1,4 SP/7
- Drawing

Final Rating: 76 ********
User Friendliness: 85 *********
Educational Value: 74 *******
Instructional Design: 68 *******

Comments: This is the software that comes with the Koala Pad, which hooks into a joystick port. By moving a finger or pointer across a pad surface, a child can draw lines, circles, or squares and fill or magnify shapes, using many available colors. Picture menu is useable but complex for young children. Price includes Koala Pad and program.

Title: Language
Company: Aquarius People Materials
Date: 1984
Price: $145.00
Age: 3-6
Computer: Apple*, TRS 80
Conceptual Area: LA/6
- Language recognition

Final Rating: 37 ****
User Friendliness: 65 *******
Educational Value: 45 *****
Instructional Design: 18 **



Comments: Child presses spacebar to advance through a fixed series of frames based on one to five language skills. Contains five disks. Easy to use, nice graphics. However, task allows no interaction except to proceed to next frame by pressing the spacebar.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Learning About Numbers
Company: C&C Software
Date: 1983
Price: $40.00
Age: 3-6
Computer: Apple
Conceptual Area: NB/8 TI/9
- Counting, clocks, basic math facts

Comments: Provides a variety of number experiences. Let's Count, Let's Tell Time, and Arithmetic Fun, all with varying difficulty levels. Many aspects of this program can be managed by an adult, due to a well-designed management system.

Final Rating: 78 ********
User Friendliness: 56 ******
Educational Value: 86 *********
Instructional Design: 91 *********

Title: Learning Line, The
Company: D.C. Heath & Company
Date: 1983
Price: $45.00
Age: 3-6
Computer: Apple
Conceptual Area: CL/1.2 LA/4
- Matching

Comments: Child uses joystick or arrow keys to move monkey to correct option, either by direct match or by correct association (e.g., rain - umbrella). Limited amount of content. Easy to use. No reading required.

Final Rating: 62 ******
User Friendliness: 82 ********
Educational Value: 73 *******
Instructional Design: 39 ****

Title: Learning the Alphabet
Company: MicroEd, Inc.
Date: 1987
Price: $29.95
Age: 3-6
Computer: Amiga (512K)
Conceptual Area: LA/4
- Matching letters, alphabetical order

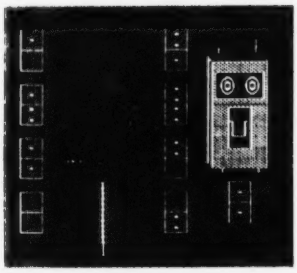
Comments: Child is shown portion of the alphabet. By clicking the mouse, child selects matching letters, in order, from letters scattered on the screen. The computer says each letter and gives a feedback message in a fairly clear male voice. Repetitive format causes children to lose interest.

Final Rating: 50 *****
User Friendliness: 49 *****
Educational Value: 52 *****
Instructional Design: 50 *****

Title: Learning With Fuzzywomp
Company: Sierra On-Line
Date: 1984
Price: $29.95
Age: 3-6
Computer: Apple*, C64
Conceptual Area: NB/3,4 CL/2
- Counting, matching, numerical order

Comments: To make selections, child moves joystick to move "Fuzzywomp." Four entertaining games provide counting and matching experience. Three of the activities have multiple difficulty levels. No reading is required. Joystick required.

Final Rating: 73 *******
User Friendliness: 80 ********
Educational Value: 79 ********
Instructional Design: 64 ******



Title: Learning With Leeper
Company: Sierra On-Line
Date: 1983
Price: $29.95
Age: 3-6
Computer: Apple*, C64, Atari
Conceptual Area: CP/1 CL/2 NB/4
- Counting, matching, drawing

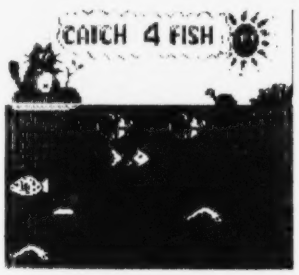
Comments: Consists of four games based on matching, counting, and hand-eye coordination. A joystick is required to move "Leeper" around the screen to make selections. Designed to entertain and teach. Similar in format to "Learning With Fuzzywomp."

Final Rating: 69 *******
User Friendliness: 78 ********
Educational Value: 82 ********
Instructional Design: 56 ******

Title: Let's Go Fishing
Company: Learning Technologies, Inc.
Date: 1985
Price: $24.95
Age: 3-6
Computer: Apple*, C64
Conceptual Area: NB/3 CL/2
- Counting and addition skills

Comments: Two activities in which child uses A and Z keys and arrow keys to string pearls by moving a needle or to fish by lowering a line to fish swimming by. A specific number must be strung or caught. Design offers no escape from activities. Not recommended

Final Rating: 36 ****
User Friendliness: 51 *****
Educational Value: 51 *****
Instructional Design: 18 **



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Letter Games
Company: Island Software
Date: 1982
Price: $25.00
Age: 3-6
Computer: Apple
Conceptual Area: LA/4 CL/2
- Letter recognition

Comments: Three drill games for letter discrimination. Upper- and lower-case options are available. No branching. Has errors if used without light pen. Not recommended.

Final Rating: 34 ***
User Friendliness: 24 **
Educational Value: 40 ****
Instructional Design: 49 *****

Title: Letter Recognition
Company: Hartley Courseware, Inc.
Date: 1983
Price: $29.95
Age: 5-7
Computer: Apple
Conceptual Area: LA/4
- Location of letters on keyboard

Comments: A single letter is presented for child to find on keyboard. Model keyboard appears as help if needed, showing letter location. Options include upper/lower-case and number words. Records are kept.

Final Rating: 48 *****
User Friendliness: 40 ****
Educational Value: 62 ******
Instructional Design: 47 *****

Title: Letter-Go-Round
Company: CBS Software
Date: 1984
Price: $34.95
Age: 3-7
Computer: C64* (cartridge), Atari
Conceptual Area: LA/4,5 TI/1,3
- Letter matching

Comments: Children press spacebar to stop and start ferris wheel to match upper- and lower-case letters or to spell three-letter words. Good graphics and sounds. Menu requires reading. Includes keyboard overlay. Discontinued in 1986.

Final Rating: 56 ******
User Friendliness: 61 ******
Educational Value: 71 *******
Instructional Design: 43 ****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Letters and First Words
Company: C&C Software
Date: 1984
Price: $50.00
Age: 3-6
Computer: Apple
Conceptual Area: LA/4,5,6
- Letters, initial consonants

Final Rating: 68 ********
User Friendliness: 55 ******
Educational Value: 72 ********
Instructional Design: 75 *********

Comments: Three games: ABC, Letter Sounds, and Building Words. Management system allows for records for up to 50 children. Child makes selections by moving box cursor. Offers wide range of content and effective design features.

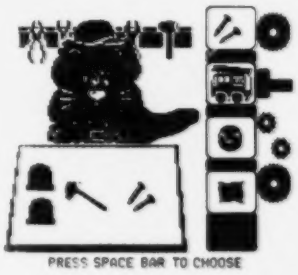
Title: Letters and Words
Company: Mindscape, Inc.
Date: 1983
Price: $39.95
Age: 3-6
Computer: Apple
Conceptual Area: LA/4,5
- Letter recognition, alphabet order

Final Rating: 68 ********
User Friendliness: 79 *********
Educational Value: 68 ********
Instructional Design: 60 ******

Comments: Three games on letters and words. Child selects Y, N, ?, or ESCAPE for each problem. Provides drill on alphabet order by asking what letter fits into a missing series. Management features: selection of number of rounds, performance summary, selection of timing of cursor movement, and new word list.

Title: Lion's Workshop
Company: Learning Technologies, Inc.
Date: 1985
Price: $24.95
Age: 4-8
Computer: Apple*, C64
Conceptual Area: CL/2
- Visual discrimination

Final Rating: 49 *****
User Friendliness: 49 *****
Educational Value: 54 *****
Instructional Design: 45 *****



Comments: Two activities: (1) Child uses A and Z keys to move conveyer belt to select an object that goes with another (e.g., thread/needle). (2) Child selects missing piece of a given object. Limited content. Confusing graphics.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: LOGO Power
Company: Mindscape, Inc.
Date: 1986
Price: $49.95
Age: 7-10
Computer: Apple
Conceptual Area: CP/3
- Teach 12 basic LOGO commands

Comments: One disk teaches a series of 11 step-by-step tutorial lessons and games designed to introduce and give practice with 12 LOGO commands, e.g., forward, right, repeat. A LOGO program disk is not included or needed to use this program.

Final Rating: 59 ******
User Friendliness: 44 ****
Educational Value: 69 *******
Instructional Design: 65 *******

Title: Magic Crayon
Company: C&C Software
Date: 1983
Price: $35.00
Age: 4-6
Computer: Apple
Conceptual Area: CP/1,3,4 SP/11
- Drawing with arrow keys

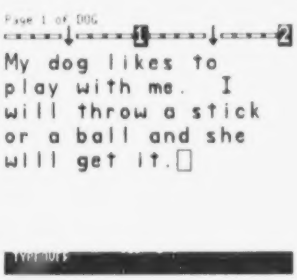
Comments: A simple drawing program in 16 colors and 3 difficulty levels. As with all the C&C programs, good record keeping and management are available to the teacher or parent. Stickers are included to label the keys.

Final Rating: 75 ********
User Friendliness: 53 *****
Educational Value: 67 *******
Instructional Design: 95 **********

Title: Magic Slate
Company: Sunburst Communications, Inc.
Date: 1984
Price: $99.95
Age: 7-up
Computer: Apple
Conceptual Area: LA/4,9 CP/4 OT/3,4
- Word processing

Comments: Easy-to-use word processor with large (20-column) text and picture menu. Effective for experience stories for pre-school level. Stories can be saved, printed, and edited. Graphics printer desirable.

Final Rating: 81 ********
User Friendliness: 70 *******
Educational Value: 92 *********
Instructional Design: 85 *********



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Magic String, The
Company: Troll Associates
Date: 1985
Price: $39.95
Age: 5-6
Computer: Apple
Conceptual Area: LA/11
- Reading skills

Comments: Three activities: (1) Shows six words. Using spacebar, child arranges words in alphabetical order. (2) Child selects word that doesn't belong, e.g., "swan, duck, fail." (3) Child arranges letters to make words. Menus require reading, limiting child-control.

Final Rating: 46 *****
User Friendliness: 52 *****
Educational Value: 46 *****
Instructional Design: 41 ****

Title: Make a Match
Company: Springboard
Date: 1984
Price: $29.95
Age: 2.5-6
Computer: Apple*, IBM*, Atari
Conceptual Area: CL/1,2
- Matching

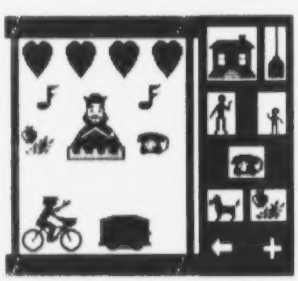
Comments: Four matching activities in which the child presses spacebar to indicate when a match in color, shape, or size is made. Strong in content. Poor in presentation.

Final Rating: 75 ********
User Friendliness: 82 ********
Educational Value: 73 *******
Instructional Design: 72 *******

Title: Many Ways to Say I Love You
Company: Mindscape
Date: 1985
Price: $29.95
Age: 4-up
Computer: Apple, C64*
Conceptual Area: CP/2,4 LA/3,4
- Creative design

Comments: Child uses arrow keys or spacebar to select elements of own "greeting card," including text, background, borders, and characters. When finished, card message can be displayed with animation and music, then saved on disk.

Final Rating: 69 *******
User Friendliness: 69 *******
Educational Value: 65 *******
Instructional Design: 69 *******

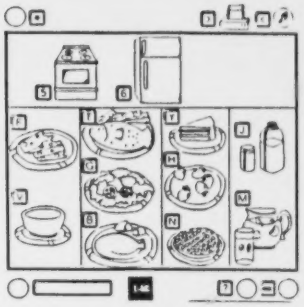


LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Mary Marvel . . . Costume Ball
Company: DIL International
Date: 1986
Price: $188.00
Age: 2-8
Computer: Apple
Conceptual Area: CL/2 SP/5 OT/1
- Variety of basic skills

Comments: Six disks: Hot and Cold Food, Treasure Hunt/Voyage in Space, Sharp/Not Sharp, Occupations/Transportation, Ricochet's Costume, and Dress Ricochet. Provides simple, limited activities. Includes overlays to use with WonderWorker touch tablet (recommended).

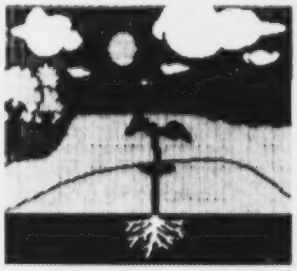
Final Rating: 62 ******
User Friendliness: 76 ********
Educational Value: 76 ********
Instructional Design: 43 ****



Title: Mary Marvel . . . the Garden
Company: DIL International
Date: 1986
Price: $289.00
Age: 2-8
Computer: Apple
Conceptual Area: CL/1,2 SP/7 TI/6 OT/1
- Functional intelligence, social skills

Comments: Ten disks — My Own Garden, Trees & Seasons, Gardening Tools, Parts of a Flower, Pollination, Water, Gardening, Growing a Bean Seed, Vegetables, and Flowers. Child presses overlay on WonderWorker touch tablet (recommended) to select answers, e.g., touches the autumn background when shown an autumn tree.

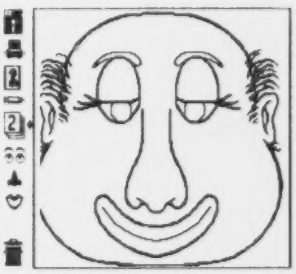
Final Rating: 62 ******
User Friendliness: 76 ********
Educational Value: 76 ********
Instructional Design: 43 ****



Title: Mask Parade
Company: Springboard
Date: 1984
Price: $39.95
Age: 4-12
Computer: Apple*, IBM, C64
Conceptual Area: CP/1,4 SP/5,7
- Creative design

Comments: Child can design and print masks and other cutouts. The design part requires choosing the components of the mask (eyes, nose, etc.). Easy to print, once printer is set up. Pictures can be saved on disk. No reading required.

Final Rating: 84 ********
User Friendliness: 75 ********
Educational Value: 86 *********
Instructional Design: 69 *******

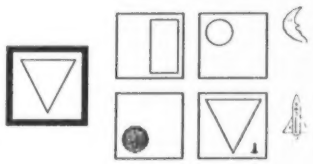


LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Match-On-A-Mac
Company: Teach Yourself by Computer
Date: 1986
Price: $39.95
Age: 3-7
Computer: MacIntosh (128K)
Conceptual Area: CL/2 SP/4,8 NB/4
- Matching, counting, upper/lower-case

Comments: Eleven multiple-choice activities in which child moves the mouse to select matching shapes, upper- or lower-case letters, b's and d's, words, numerals, and quantities. Also includes game for practicing use of mouse. Keeps records and allows for individualization of the presentation.

Final Rating: 73 *******
User Friendliness: 78 ********
Educational Value: 76 ********
Instructional Design: 66 *******



Title: Math and Me
Company: Davidson and Associates
Date: 1987
Price: $49.95
Age: 3-6
Computer: Apple (128K)
Conceptual Area: NB/1,3,4,7 CL/2 SE/4
- Shapes, patterns, numbers, and addition

Comments: Twelve activities covering shape matching, number recognition, patterns, numerical order, and addition with objects or numerals. Child uses mouse or arrow keys to select one of four boxes in a multiple-choice format. Good design and graphics. Good range in content.

Final Rating: 78 ********
User Friendliness: 80 ********
Educational Value: 94 **********
Instructional Design: 67 *******

Title: Math Facts Level 1
Company: THESIS
Date: 1980
Price: $25.00
Age: 5-7
Computer: Apple
Conceptual Area: NB/1,4,5,8
- Counting, numeral recognition

Comments: Presents a "workbook" context to the child, based on numerals and numeral words. Poorly designed. Not recommended.

Final Rating: 38 ****
User Friendliness: 41 ****
Educational Value: 33 ***
Instructional Design: 25 ***

Title: Math Magic
Company: MindPlay
Date: 1984
Price: $39.95
Age: 4-9
Computer: Apple*, IBM
Conceptual Area: NB/3
- Math facts (add., sub., mult., div.)

Final Rating: 53 *****
User Friendliness: 53 *****
Educational Value: 67 *******
Instructional Design: 43 ****

Comments: A math game in which player deflects bouncing ball to break down a wall while periodically answering math problems to score points. Design options include paddle size, level and number of problems, and speed of ball.

Title: Math Maze
Company: D.C. Heath & Company
Date: 1983
Price: $39.95
Age: 6-10
Computer: Apple*, IBM, Atari ($19.95), C64
Conceptual Area: NB/9
- Basic math facts

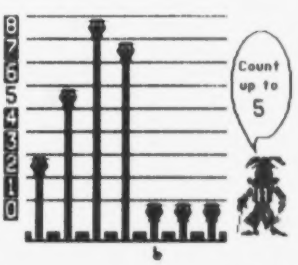
Final Rating: 52 *****
User Friendliness: 47 *****
Educational Value: 62 ******
Instructional Design: 50 *****

Comments: Child moves fly through one of 40 simple mazes (can design own) to the correct answer, using a basic addition, subtraction, division, or multiplication fact. Available option turns spider loose in maze. A well-designed activity for basic facts practice.

Title: Math Rabbit
Company: The Learning Company
Date: 1986
Price: $39.95
Age: 5-7
Computer: Apple*, IBM
Conceptual Area: NB/1,3,4,8 OT/1
- Counting, matching sets, addition, subtraction

Final Rating: 78 ********
User Friendliness: 67 *******
Educational Value: 92 *********
Instructional Design: 79 ********

Comments: Enjoyable activities: child uses arrow keys, spacebar, and RETURN to count using a number line and musical scale; to match numerals; to match a set of objects or a math problem to a given number; to solve math problems to create number patterns; and to match sets of objects, numbers, and math problems. Four levels of play.



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Math Sequences
Company: Milliken Publishing Co.
Date: 1985
Price: $60.00
Age: 5-6
Computer: Apple
Conceptual Area: NB/3,8
- Number readiness

Comments: First of a 17-disk sequence spanning grades K-10 ($495 for all). Uses a flexible, powerful password system that can control content and keep records for up to 100 children. Children start by using number keys to count objects and can work up to numerical order, e.g., (6, __, 8).

Final Rating: 69 *******
User Friendliness: 62 ******
Educational Value: 74 *******
Instructional Design: 69 *******

Title: Maze-o
Company: D.C. Heath & Company
Date: 1985
Price: $45.00
Age: 6-12
Computer: Apple
Conceptual Area: LA/5
- Spelling words

Comments: A spelling game that presents 10 out of 720 words at a time. Child earns points by moving a man (with joy-stick, arrow keys) to incorrectly spelled words, thus working through simple maze. Moving through maze is slow. Content best-suited for grades 1 to 6.

Final Rating: 55 ******
User Friendliness: 55 ******
Educational Value: 57 ******
Instructional Design: 52 *****

Title: Memory Building Blocks
Company: Sunburst Communications, Inc.
Date: 1986
Price: $65.00
Age: 5-adult
Computer: Apple
Conceptual Area: OT/1 CL/2
- Visual and auditory memory skills

Comments: Five Concentration-type games on one disk: Pictures, Words, Letters, Shapes, and Tunes. An easy-to-use management system allows use of own words or control over game difficulty. Minimal reading required. Operates with regular keyboard, Muppet keyboard, or Touch Window.

Final Rating: 89 *********
User Friendliness: 91 *********
Educational Value: 86 *********
Instructional Design: 90 *********

Title: Memory Master
Company: Stone & Associates
Date: 1985
Price: $39.95
Age: 2-6
Computer: IBM*, Atari ST
Conceptual Area: LA/5 OT/1
- Memory skills

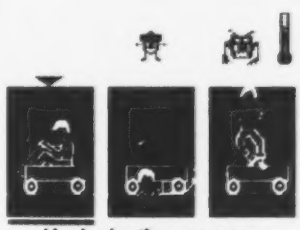
Comments: Consists of three games in which child matches object with object, object with related object, or word with object. Also includes a picture Concentration game. Good graphics.

Final Rating: 56 ******
User Friendliness: 58 ******
Educational Value: 83 ********
Instructional Design: 41 ****

Title: Micro-LADS
Company: Laureate Learning Systems
Date: 1984
Price: $650.00
Age: 2-up
Computer: Apple
Conceptual Area: LA/1,8
- Syntactic comprehension

Comments: Six disks covering grammatical constructions. Child hears sentence, e.g., "The dogs walk," and must pick correct picture (using spacebar). Keeps complete records. Adult must set up a lesson. Designed for learning disabled children. Requires an Echo or Cricket voice synthesizer.

Final Rating: 75 ********
User Friendliness: 85 **********
Educational Value: 65 *******
Instructional Design: 75 ********



He is in the wagon.

Title: Milk Bottles
Company: Island Software
Date: 1982
Price: $25.00
Age: 3-6
Computer: Apple
Conceptual Area: NB/1
- Comparing amounts

Comments: Four numbered areas with differing amounts of white represent milk in bottles. Child types number of cylinder or touches bottle with light pen to answer question that is written below, e.g., "Which is full?" Not recommended.

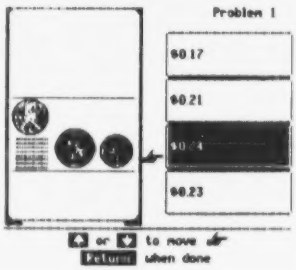
Final Rating: 39 ****
User Friendliness: 30 ***
Educational Value: 41 ****
Instructional Design: 45 *****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Money Works
Company: MECC
Date: 1987
Price: $55.00
Age: 6-8
Computer: Apple (128K)
Conceptual Area: NB/1,3
- Money skills

Comments: Four activities on one disk. Child uses arrows keys, ESCAPE, and RETURN to decide how much money is in a safe, count out an amount with a change machine, or make and print currency. Offers many teacher options. Correlates with many textbooks. Good child-control. The best money program we've seen.

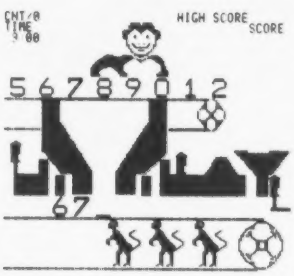
Final Rating: 76 ********
User Friendliness: 55 ******
Educational Value: 91 *********
Instructional Design: 88 *********



Title: Monkey Math
Company: Artworx
Date: 1983
Price: $17.95
Age: 4-10
Computer: Apple*, C64, Atari
Conceptual Area: NB/4
- Basic math facts, numerical order

Comments: Provides drill and practice with math facts. Monkey knocks out correct answers on an assembly line to earn bananas and beat the clock. Practice with basic math facts (four operations) available at three levels.

Final Rating: 49 *****
User Friendliness: 38 ****
Educational Value: 53 *****
Instructional Design: 43 ****



Title: Moptown Parade
Company: The Learning Company
Date: 1981
Price: $59.95 (school edition)
Age: 6-10
Computer: Apple*, IBM*, C64
Conceptual Area: CL/1,2,4 SE/4
- Classification and seriation

Comments: Contains seven progressively harder attribute games. Effective in focusing child's attention on attributes and the logic of sets. Strong in content. However, requires reading for independent use. Color monitor required. School edition includes back-up disk, teacher's guide, blackline masters, and activity ideas.

Final Rating: 55 ******
User Friendliness: 51 *****
Educational Value: 81 ********
Instructional Design: 45 *****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Muppet Word Book
Company: Sunburst Communications, Inc.
Date: 1986
Price: $65.00
Age: 3-6
Computer: Apple
Conceptual Area: LA/4,6 CL/1,2
- Letters and words

Comments: Six games on one disk provide practice with letters, upper/lower-case matching, beginning consonants, and word endings. The final activity is a simple word processor using large letters that can be printed. Can be used with a mouse, Touch Window, Muppet Learning Keys, or regular keyboard.

Final Rating: 82 ********
User Friendliness: 85 *********
Educational Value: 92 *********
Instructional Design: 73 *******

Title: Muppets On Stage
Company: Sunburst Communications, Inc.
Date: 1984
Price: $65.00
Age: 3-6
Computer: Apple*, IBM, C64
Conceptual Area: LA/4 NB/4
- Counting skills, letter recognition

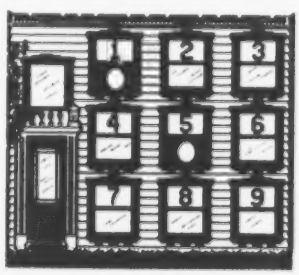
Comments: Three games: Discovery, Letters, and Numbers. Provides experience with letters, colors, numerals, and number. Well-designed. Is effective in giving child-control. This is the program that comes with the Muppet Learning Keys, although it can be used with a regular keyboard.

Final Rating: 81 ********
User Friendliness: 73 *******
Educational Value: 77 ********
Instructional Design: 69 *******

Title: Muppetville
Company: Sunburst Communications, Inc.
Date: 1986
Price: $65.00
Age: 4-6
Computer: Apple
Conceptual Area: CL/2 NB/3,4 OT/1
- Classifying, memory skills

Comments: Six activities on one disk, starring the Muppets. Menu design allows child-control. Supports Touch Window (used for review), Muppet Learning Keys, mouse, or keyboard. Gives practice with shapes, colors, and numbers. Options allow for several difficulty settings.

Final Rating: 87 *********
User Friendliness: 94 *********
Educational Value: 95 **********
Instructional Design: 75 ********



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Music
Company: Lawrence Hall of Science
Date: 1984
Price: $34.95
Age: 4-6
Computer: Apple
Conceptual Area: CP/2 SE/1,4
- Seriation of pitch

Comments: Make Music, Note Sandwich, and Play a Tune give experience with an eight-tone C-scale, associating notes with numbers and colored bars of correlated lengths. Limited in content. Design is effective in giving child-control.

Final Rating: 59 ******
User Friendliness: 63 ******
Educational Value: 70 *******
Instructional Design: 51 *****

Title: Music Maestro
Company: Springboard
Date: 1984
Price: $34.95
Age: 4-10
Computer: Apple*, IBM, C64, Atari
Conceptual Area: CP/2 SE/1 TI/4
- Practice with musical notation

Comments: Four games in which children play and record tunes, using number keys on keyboard, thus building a correlation between numbers and notes. Kaleidoscope (game 4) adds random color to the notes.

Final Rating: 73 *******
User Friendliness: 68 *******
Educational Value: 83 ********
Instructional Design: 71 *******

Title: Music Readiness
Company: Sterling Swift
Date: 1984
Price: $69.95
Age: 3-8
Computer: Apple
Conceptual Area: CP/2 TI/4
- Music concepts: pitch and rhythm

Comments: A drill program that could be used to reinforce note length and pitch comparison. Two disks with four games each. Menu waits are very long. Limited content and challenge shortens life. Poorly designed.

Final Rating: 41 ****
User Friendliness: 38 ****
Educational Value: 40 ****
Instructional Design: 58 ******

Title: My ABC's
Company: Paperback Software
Date: 1984
Price: $24.95
Age: 3-7
Computer: IBM
Conceptual Area: LA/4 NB/3 OT/1
- Letter and numeral recognition

Comments: Six activities: First Letter, Match Letters, Dancing Letters (any key pressed makes pictures dance on the screen), Counting Objects, and a multilevel game of Concentration. Good child-control. Good graphics. A good all-purpose program for IBM PC owners.

Final Rating: 63 ******
User Friendliness: 67 *******
Educational Value: 91 *********
Instructional Design: 45 *****

Title: My Book
Company: BeCi Software
Date: 1984
Price: $34.95
Age: 4-up
Computer: C64*, Atari
Conceptual Area: LA/9
- Writing stories

Comments: A picture- and text-creation program. Child uses joystick to move a balloon to select objects and options. Text is added using keyboard. Stories can be saved and printed. Reading required to select options. Joystick required.

Final Rating: 38 ****
User Friendliness: 27 ***
Educational Value: 39 ****
Instructional Design: 46 *****

Title: My Letters, Numbers, and Words
Company: Stone & Associates
Date: 1983
Price: $39.95
Age: 2-6
Computer: IBM*, Apple, Atari ST
Conceptual Area: LA/5
- Letter recognition

Comments: Practice with words, the numbers 1-10, key location, and letters, all reinforced through well-designed graphics and sounds. Design requires adult to start and stop the program, however. This program has later version called "Kid's Stuff" with better design features.

Final Rating: 46 *****
User Friendliness: 35 ****
Educational Value: 79 ********
Instructional Design: 38 ****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: My Words
Company: Hartley Courseware, Inc.
Date: 1987
Price: $69.95
Age: 5-8
Computer: Apple (64K)
Conceptual Area: LA/2,3,4,5,9 CP/4
- Language experience

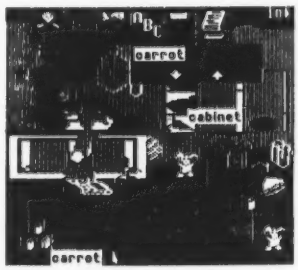
Comments: A talking word processor that keeps a list of every word used in a story. Lists can be stored, printed, and used again for other writing activities. While words are typed, they are also spoken in robotic voice (Echo or Cricket required). A mouse is recommended. Uses small (40-column) print.

Final Rating: 78 ********
User Friendliness: 60 ******
Educational Value: 92 **********
Instructional Design: 89 **********

Title: Not Too Messy, Not Too Neat
Company: D.C. Heath & Company
Date: 1988
Price: $75.00
Age: 5-10
Computer: Apple
Conceptual Area: LA/2,3,5,9 CP/4 SP/4,7
- Language experience

Comments: Children use mouse, Koala Pad, joystick, or arrow keys to select or move objects, backgrounds, words, or characters of a story. They can also add their own words. Resulting stories can be saved and printed in color. Includes four copies of the storybook. Good design. Fun to use.

Final Rating: 89 **********
User Friendliness: 85 **********
Educational Value: 94 **********
Instructional Design: 91 **********



Title: Notable Phantom, The
Company: DesignWare
Date: 1984
Price: $9.95
Age: 5-10
Computer: Apple*, IBM, C64
Conceptual Area: SE/1 CP/2
- Musical notation, pitch recognition

Comments: Uses a plastic overlay to simulate a full 1½ octave keyboard for use with three activities. Effective in teaching note names and for playing and recording songs in a game context. Main menu is confusing, may require adult help to start younger child.

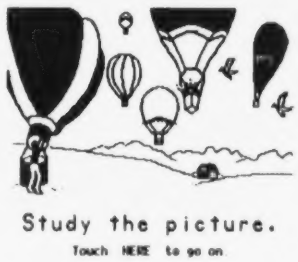
Final Rating: 66 *******
User Friendliness: 68 *******
Educational Value: 80 ********
Instructional Design: 56 ******

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Now You See It, Now You Don't
Company: Sunburst Communications, Inc.
Date: 1987
Price: $75.00
Age: 8-11
Computer: Apple
Conceptual Area: OT/1 CL/2,4,5 SP/4,8
- Memory skills

Comments: Child uses keyboard, Touch Window, or Muppet keyboard to select answers. On disk 1, child is shown a set of objects to memorize, and then must identify one of the objects. On disk 2, child sees picture with, then without, one or more of its objects, and must identify what's missing. Some reading required.

Final Rating: 81 ********
User Friendliness: 72 *******
Educational Value: 91 *********
Instructional Design: 83 ********



Title: Number BeCi
Company: BeCi Software
Date: 1983
Price: $19.95
Age: 3-6
Computer: C64*, VIC 20
Conceptual Area: NB/3
- Grouping and counting

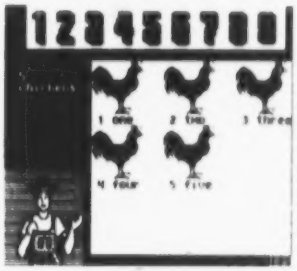
Comments: Consists of a timed counting activity in which a child counts like or unlike objects. Three levels of difficulty available. Designed for low capacity (memory) computers. Available on cassette.

Final Rating: 29 ***
User Friendliness: 34 ***
Educational Value: 40 ****
Instructional Design: 20 **

Title: Number Farm
Company: DLM
Date: 1984
Price: $32.95
Age: 3-6
Computer: Apple*, C64, IBM
Conceptual Area: NB/3,4,5,8
- Counting skills

Comments: Six entertaining games present multiple counting experiences. Feedback is effective. One game presents counting in a unique way by having child count sounds. Provides good number practice.

Final Rating: 74 *******
User Friendliness: 62 ******
Educational Value: 92 *********
Instructional Design: 73 *******



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Numbers
Company: Lawrence Hall of Science
Date: 1984
Price: $34.95
Age: 4-6
Computer: Apple
Conceptual Area: NB/3,4,8
- Numeral disc., counting

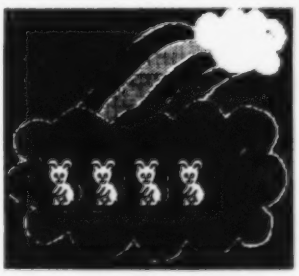
Comments: Provides two activities: Balloons — lets the child pop balloons in relation to a number on the keyboard, using spacebar and RETURN. Secret Numbers — reveals parts of numerals for the child to identify. Well-designed. Best for kindergarten.

Final Rating: 58 ******
User Friendliness: 65 ********
Educational Value: 79 *********
Instructional Design: 41 ****

Title: Observation and Classif.
Company: Hartley Courseware, Inc.
Date: 1985
Price: $35.95
Age: 3-5
Computer: Apple
Conceptual Area: CL/1,2,4
- Classification skills

Comments: Four activities. Child selects which object is different from others, which is the same size as one shown, or which belongs to the same class as a group shown, e.g., "all animals." Teacher options allow control over sound, movement of cursor, and number of plays per game. Child selects own difficulty level.

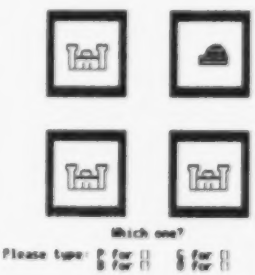
Final Rating: 80 *********
User Friendliness: 70 ********
Educational Value: 86 **********
Instructional Design: 86 **********



Title: Odd One Out
Company: Sunburst Communications, Inc.
Date: 1983
Price: $65.00
Age: 3-10
Computer: Apple*, C64
Conceptual Area: CL/1,2,4
- Matching/discrimination

Comments: Consists of five games based on format of selecting one of four boxes that doesn't belong. Child presses first letter of the color of the box containing the odd shape, e.g., B for blue. Content accessible to teacher.

Final Rating: 74 ********
User Friendliness: 58 ******
Educational Value: 84 *********
Instructional Design: 83 *********

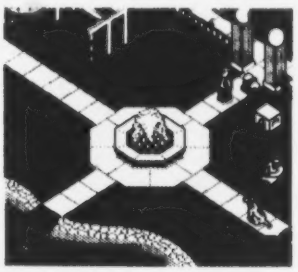


LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Ollie and Seymour
Company: Hartley Courseware, Inc.
Date: 1984
Price: $49.95
Age: 3-up
Computer: Apple
Conceptual Area: CL/2 SP/4,6,8 TI/1 OT/1
- Pedestrian safety, readiness skills

Comments: A unique simulation in which child uses arrow keys to move "Ollie" around a park and through the streets, where he can practice safe street crossings, obeying traffic signals, or games. Games involve shape and color matching, Concentration with traffic signs, and stacking and counting blocks.

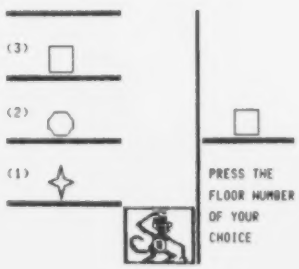
Final Rating: 77 ********
User Friendliness: 85 *********
Educational Value: 75 ********
Instructional Design: 71 *******



Title: One Banana More
Company: Data Command
Date: 1984
Price: $39.95
Age: 5-6
Computer: Apple
Conceptual Area: CL/2 NB/1 LA/4,5
- Reading readiness, counting

Comments: Six multiple-choice activities in which a child sees an object and presses the numeral of a matching shape, letter, size, word, number, or set, depending on the level selected. Bananas are rewards. No escape. Menu requires reading.

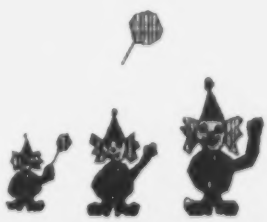
Final Rating: 34 ***
User Friendliness: 37 ****
Educational Value: 42 ****
Instructional Design: 26 ***



Title: Ordering/Sequencing
Company: Aquarius People Materials
Date: 1984
Price: $115.00
Age: 3-6
Computer: Apple*, TRS80
Conceptual Area: SE/2
- Seriation concepts

Comments: Set of four disks. Good graphics, content. However, design is similar to book format. Child presses spacebar to advance to next display with no interaction. No random generation or branching.

Final Rating: 38 ****
User Friendliness: 69 *******
Educational Value: 41 ****
Instructional Design: 20 **



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Paint With Words
Company: MECC
Date: 1986
Price: $55.00
Age: 3-7
Computer: Apple (64K)
Conceptual Area: LA/5 CP/1,4
- Word recognition

Final Rating: 73 *******
User Friendliness: 63 ******
Educational Value: 91 *********
Instructional Design: 69 *******

Comments: Using mouse, joystick, or keyboard, child creates a scene by moving one of eight words to a spot on the screen, where it becomes a picture that is a part of the scene. Scenes can be printed, saved, or changed. Twelve word-sets can be created from 124 words. Ufonic voice synthesizer (optional) will say words.

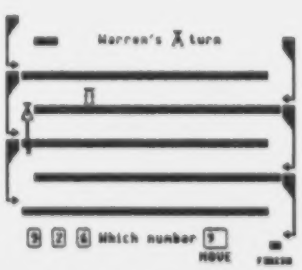
Title: Pals Around Town
Company: CBS Software
Date: 1985
Price: $14.95
Age: 4-6
Computer: C64
Conceptual Area: SP/4,6,7
- Community Exploration

Final Rating: 73 *******
User Friendliness: 76 ********
Educational Value: 73 *******
Instructional Design: 69 *******

Comments: Child uses joystick (required) and function keys to explore and add objects to one of five scenes, e.g., a playground, a schoolroom, Sesame street, Bert and Ernie's house, and downtown. Good graphics and sound. Disk version takes about three minutes to load. Color monitor recommended.

Title: Path-Tactics
Company: MECC
Date: 1986
Price: $55.00
Age: 5-11
Computer: Apple*, IBM, C64
Conceptual Area: NB/3,5,6
- Counting, basic math facts

Final Rating: 69 *******
User Friendliness: 50 *****
Educational Value: 91 *********
Instructional Design: 72 *******



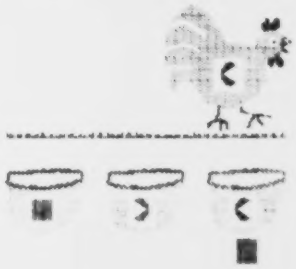
Comments: A strategy game in which child does a math problem to decide how many steps a robot must move to get to a finish point in the least amount of steps. Levels range from counting to division (e.g., 63 ÷ __ = 7). Teacher options allow control over presentation of content. Child can play against partner or computer. Enjoyable program.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Patterns and Sequences
Company: Hartley Courseware, Inc.
Date: 1984
Price: $35.95
Age: 3-6
Computer: Apple
Conceptual Area: CL/1 SE/1
- Matching/discrimination

Comments: Contains four clearly designed activities that provide large objects, positive feedback, and multiple skill levels. No reading required.

Final Rating: 72 *******
User Friendliness: 87 *********
Educational Value: 83 ********
Instructional Design: 48 *****



Title: Peanuts Maze Marathon
Company: Random House Software
Date: 1984
Price: $39.95
Age: 4-8
Computer: Apple*, C64, IBM
Conceptual Area: TI/4 SP/4
- Problem solving (mazes)

Comments: Peanuts cartoons animate themselves after the completion of a simple maze. Use with the keyboard is not smooth; a joystick is recommended. Time is kept for each maze.

Final Rating: 46 *****
User Friendliness: 45 *****
Educational Value: 50 *****
Instructional Design: 46 *****

Title: Peanuts Picture Puzzlers
Company: Random House Software
Date: 1984
Price: $39.95
Age: 4-8
Computer: Apple*, C64, IBM
Conceptual Area: SP/1
- Problem solving (puzzles)

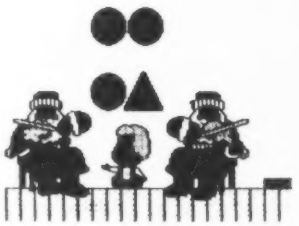
Comments: Presents a picture to the child, then makes a puzzle by dividing it into sections. After the child puts all the pieces into the puzzle, the picture becomes animated. Entertaining program. Could be difficult for 4-year-olds to operate, however.

Final Rating: 59 ******
User Friendliness: 44 ****
Educational Value: 51 *****
Instructional Design: 74 *******

Title: Peter and the Wolf Music
Company: Spinnaker Software Corp.
Date: 1985
Price: $39.95
Age: 3-7
Computer: Apple*, C64 ($24.95)
Conceptual Area: CL/2 SE/1,2,4 OT/1
- Music skills: pitch and melody

Comments: Child uses joystick or arrows keys in six music games and one exploratory activity. Gives practice distinguishing tones, ordering notes according to pitch, and re-creating simple melodies. Good design. Fun to use.

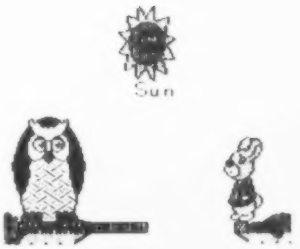
Final Rating: 77 ********
User Friendliness: 83 ********
Educational Value: 95 **********
Instructional Design: 62 ******



Title: Peter Rabbit Reading
Company: Spinnaker Software Corp.
Date: 1985
Price: $39.95
Age: 3-6
Computer: Apple*, C64
Conceptual Area: LA/4,5,6 TI/6
- Letters, letter sounds, and words

Comments: Child uses arrows keys or joystick to move Peter to his home. On the way, Peter matches letters, sounds, and vowels. Contains four levels. Clear graphics, enjoyable activities. In some games, words are "spoken," but voice is hard to understand (extra synthesizer not required).

Final Rating: 79 ********
User Friendliness: 70 *******
Educational Value: 94 *********
Instructional Design: 76 ********



Title: Picture Dictionary
Company: D.C. Heath & Company
Date: 1985
Price: $45.00
Age: 5-7
Computer: Apple
Conceptual Area: LA/4 OT/1
- Word recall and memory

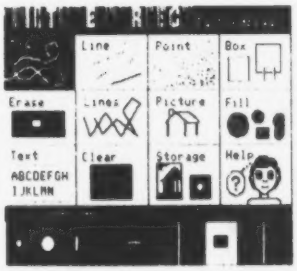
Comments: Allows the association of pictures with words, based on initial consonants. Child can choose picture or type word. Own pictures and words can be added, although the process is difficult. Uses lower-case letters only.

Final Rating: 53 *****
User Friendliness: 63 ******
Educational Value: 73 *******
Instructional Design: 35 ****

Title: Picture Perfect
Company: MindPlay
Date: 1984
Price: $39.95
Age: 4-up
Computer: Apple*, IBM
Conceptual Area: CP/1 LA/3
- Draw, color, and write

Final Rating: 79 ********
User Friendliness: 82 ********
Educational Value: 77 ********
Instructional Design: 75 ********

Comments: Child uses joystick or mouse to draw points, lines, or boxes and to write text. Features include a 72-picture library, five color selections, and drawing tool options. Drawing requires going between two screens, which is difficult for young children. Pictures can be saved and printed.



Title: Pictures, Letters, and Sounds
Company: Hartley Courseware, Inc
Date: 1986
Price: $35.95
Age: 5-6
Computer: Apple
Conceptual Area: LA/4,5
- Letter recognition

Final Rating: 78 ********
User Friendliness: 63 ******
Educational Value: 91 **********
Instructional Design: 82 ********

Comments: Five games offer a range of activity. Child can type using picture symbols for letters (e.g., Saw-S), pop balloons, or position X's or O's in a game of Tick-Tack-Toe. Design allows child-control.

Title: Play Together Learn Together
Company: Grolier Electronic Publishing
Date: 1985
Price: $29.95
Age: 4-7
Computer: Apple*, IBM, C64
Conceptual Area: OT/2
- Introduction to computer use

Final Rating: 44 ****
User Friendliness: 45 *****
Educational Value: 53 *****
Instructional Design: 38 ****

Comments: A 182-page book and disk designed for parents to use with their child to help both learn more about the computer. Has 36 activities covering such topics as the keyboard, moving the cursor, and simple programs written in BASIC. Ratings apply to the programs on the disk.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Pockets and Her New Sneakers
Company: World Book, Inc.
Date: 1984
Price: $39.95
Age: 3-5
Computer: IBM
Conceptual Area: CL/2
- Sorting and classification skills

Comments: Eight simple games in which children use spacebar, arrow keys and RETURN to match flowers, buttons, fish, toys, or shoes. Good sounds, graphics. Effective in giving child control. No CMI.

Final Rating: 62 ******
User Friendliness: 70 *******
Educational Value: 84 ********
Instructional Design: 44 ****

Title: Pockets Goes on a Picnic
Company: World Book, Inc.
Date: 1984
Price: $39.95
Age: 3-5
Computer: IBM
Conceptual Area: CL/2 SP/1
- Classification, part/whole relations

Comments: Six simple activities in which child uses spacebar and RETURN to put things together by category (e.g., food, toys) or to match parts of insects to make a whole. Successful in providing child-control. Good sounds and graphics. No CMI.

Final Rating: 61 ******
User Friendliness: 68 *******
Educational Value: 87 *********
Instructional Design: 43 ****

Title: Pockets Goes on Vacation
Company: World Book, Inc.
Date: 1984
Price: $39.95
Age: 3-5
Computer: IBM
Conceptual Area: SP/4
- Positional relationships

Comments: Consists of one free-play and five structured activities on positional relations. Child uses arrow keys to move objects in/out, above/below, left/right, etc. Menu gives child control.

Final Rating: 63 ******
User Friendliness: 74 *******
Educational Value: 80 ********
Instructional Design: 47 *****

Title: Pockets Goes to the Carnival
Company: World Book, Inc.
Date: 1984
Price: $39.95
Age: 3-5
Computer: IBM
Conceptual Area: NB/2,3 CP/2
- Counting, 1-1 correspondence

Comments: Six simple games in which child uses spacebar and RETURN to match balloons with animals or count objects on the screen. One activity allows a child to create tones with the number keys. No CMI. Effective in permitting child-control.

Final Rating: 68 *******
User Friendliness: 81 ********
Educational Value: 85 *********
Instructional Design: 49 *****

Title: Pockets Leads the Parade
Company: World Book, Inc.
Date: 1984
Price: $39.95
Age: 3-5
Computer: IBM
Conceptual Area: CL/2 SE/2
- Pattern recognition

Comments: Six games featuring (1) a dancing bear whose movements can be controlled by pressing any letter key and (2) various games copying and recognizing patterns, using spacebar and RETURN. Good graphics, sound, content.

Final Rating: 75 ********
User Friendliness: 81 ********
Educational Value: 96 **********
Instructional Design: 58 ******

Title: Preschool Fun
Company: THESIS
Date: 1980
Price: $25.00
Age: 3-6
Computer: Apple
Conceptual Area: LA/4 CL/2 SP/4 NB/3
- Counting, letters, & matching

Comments: Presents 11 games in which child must press Y or N to indicate a match. Offers a wide variety of content through simple graphics and sounds. Limited design offers little interaction.

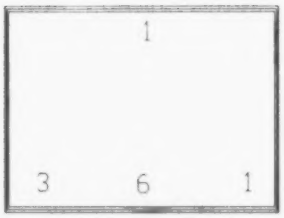
Final Rating: 44 ****
User Friendliness: 38 ****
Educational Value: 45 *****
Instructional Design: 48 *****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Preschool IQ Builder I
Company: PDI Software
Date: 1982
Price: $24.95
Age: 3-6
Computer: Apple*, C64, Atari, PET*
Conceptual Area: CL/2 LA/4
- Concepts of same and different

Final Rating: 38 ****
User Friendliness: 35 ****
Educational Value: 51 *****
Instructional Design: 33 ***

Comments: Contains seven lessons in which the child presses the S or L key to indicate if the two objects on the screen are the same or different. Lessons range from colors (color monitor required) to letters. Provides little range of challenge or child-control.



Title: Preschool IQ Builder II
Company: PDI Software
Date: 1984
Price: $24.95
Age: 3-6
Computer: Apple*, C64, PET, TI
Conceptual Area: CL/2 LA/5
- Matching, shapes, numbers, letters

Final Rating: 43 ****
User Friendliness: 41 ****
Educational Value: 48 *****
Instructional Design: 42 ****

Comments: Contains six lessons all using same format of having model object at top of screen. To receive smile face, child uses spacebar and arrow keys to move model object to a matching mate at the screen bottom. Records are kept.

Title: Primary Editor 1.0
Company: IBM Educational Systems
Date: 1985
Price: $60.00
Age: 4-6
Computer: IBM
Conceptual Area: LA/9
- Word processing

Final Rating: 56 ******
User Friendliness: 33 ***
Educational Value: 84 ********
Instructional Design: 63 ******

Comments: A word processor. Children can write, edit, print, and save stories. Designed to help children practice writing. Prints in typewriter-style print. Two disks, program, and tutorial. Menu requires reading.

Title: Puss in Boot
Company: Island Software
Date: 1982
Price: $25.00
Age: 3-6
Computer: Apple
Conceptual Area: SP/4
- Spatial concepts

Comments: Gives practice with 14 "positional concepts," such as below, above, in, out. Some concepts not presented accurately in a two-dimensional presentation. Limited content. Poorly designed. Not recommended.

Final Rating: 34 ***
User Friendliness: 33 ***
Educational Value: 33 ***
Instructional Design: 35 ****

Title: Puzzle Master
Company: Springboard
Date: 1984
Price: $34.95
Age: 4-up
Computer: Apple*, IBM, C64
Conceptual Area: SP/1,2 CP/1,4
- Problem solving (puzzles)

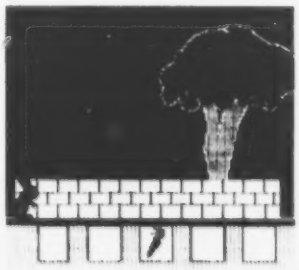
Comments: Child uses joystick or arrow keys to select one of 30 pictures or create own, which can be scrambled and reassembled using icons. Offers hints if needed. Puzzles can be saved on disk. Child can select puzzles of varying difficulty (2-800 pieces). No Reading.

Final Rating: 84 ********
User Friendliness: 82 ********
Educational Value: 91 **********
Instructional Design: 81 ********

Title: Rabbit Scanner, The
Company: E.C.S.
Date: 1986
Price: $29.95
Age: 2-5
Computer: Apple
Conceptual Area: TI/1,3 CL/2
- Eye tracking, matching

Comments: A simple program designed to provide practice scanning. Child watches a rabbit move across the screen and presses spacebar when the rabbit is over a carrot. Level of challenge can be adjusted by changing distractors, speed of rabbit, starting position. Requires adult setup.

Final Rating: 67 *******
User Friendliness: 58 ******
Educational Value: 83 ********
Instructional Design: 64 ******



Title: Race the Clock
Company: MindPlay
Date: 1984
Price: $39.95
Age: 5-12
Computer: Apple*, IBM
Conceptual Area: LA/5 OT/1
- Memory

Comments: Concentration game with animated pictures. Child is given an amount of time to use joystick, mouse, paddles, or arrow keys to match pairs: picture/picture, picture/word, or word/word. Flexible design allows control of difficulty.

Final Rating: 69 *******
User Friendliness: 57 ******
Educational Value: 72 *******
Instructional Design: 77 ********

Title: Rainbow Painter
Company: Springboard
Date: 1984
Price: $29.95
Age: 4-12
Computer: Apple*, C64
Conceptual Area: CP/1 SP/9
- Drawing

Comments: Presents an electronic coloring book to the child in which the colors can be selected and filled in. Menus are easy to use. A free-draw option contains "mirror drawing" activity. Offers range of activities that child can control.

Final Rating: 80 ********
User Friendliness: 80 ********
Educational Value: 73 *******
Instructional Design: 86 *********

Title: Reader Rabbit
Company: The Learning Company
Date: 1984
Price: $39.95
Age: 5-7
Computer: Apple*, IBM, C64, Apple IIGS ($59.95)
Conceptual Area: LA/4,5 OT/1
- Basic reading skills/comprehension

Comments: Four activities in which child uses spacebar, joystick, or paddles to match letters of C-V-C words, unscramble letters to create words, create word ladders, or play one of seven levels of Concentration. Uses over 200 lower-case three-letter words. Apple IIGS version says words.

Final Rating: 71 *******
User Friendliness: 59 ******
Educational Value: 87 *********
Instructional Design: 71 *******

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Reading Comprehension: Lev. 1
Company: Houghton Mifflin
Date: 1988
Price: $174.00
Age: 6-7
Computer: Apple (64K)
Conceptual Area: LA/5,6,8
- Reading comprehension skills

Comments: Child uses spacebar, arrow keys, and RETURN to page through a story in which comprehension questions are asked through an Echo or Cricket synthesizer (required). Uses clear female voice. To assist reading, child can select and listen to any word in the story. Sixteen stories come on eight disks. Keeps records. Good design.

Final Rating: 82 ********
User Friendliness: 60 ******
Educational Value: 95 **********
Instructional Design: 86 *********

Title: Reading Helpers
Company: Houghton Mifflin
Date: 1986
Price: $135.00
Age: 5-6-
Computer: Apple (64K)
Conceptual Area: LA/1,4,6,8 CL/2
- Reading skills

Comments: Five disks. Child presses any key to make selections in 11 games based around decoding and encoding, sight vocabulary, letter recognition, memory, thinking skills, matching, words in context, and alphabetical order of words. Content best for grade 1 and above. Initial adult help required.

Final Rating: 69 *******
User Friendliness: 53 *****
Educational Value: 88 *********
Instructional Design: 70 *******

Title: Reading Machine, The
Company: SouthWest EdPsych Services
Date: 1982
Price: $59.95
Age: 5-8
Computer: Apple
Conceptual Area: LA/4
- Various language skills

Comments: Separate activities (28) that range from matching letters to phonics practice (cassette interface available). Good management options allow teacher to set up lessons, diagnose progress, or keep records for up to 60 children. Blocky graphics.

Final Rating: 65 *******
User Friendliness: 56 ******
Educational Value: 69 *******
Instructional Design: 67 *******

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Reading Readiness
Company: EMC Publishing
Date: 1982
Price: $19.95
Age: 4-6
Computer: Apple
Conceptual Area: CL/2
- Matching shapes, letters, numerals

Comments: Child matches a model with one of seven by pressing a numeral key. Choice of symbols, letters, or numerals available. Feedback is smile/frown face. Ten problems used for three activities. Rigid design. Little child-control. Not recommended. Discontinued in 1987.

Final Rating: 32 ***
User Friendliness: 34 ***
Educational Value: 52 *****
Instructional Design: 25 ***

Title: Reading Starters
Company: Houghton Mifflin
Date: 1986
Price: $135.00
Age: 5-6
Computer: Apple (64K)
Conceptual Area: LA/4,5,6,7,8 CL/2 SP/4
- Reading skills

Comments: Child use six animals' names, Deb, Jip, Sam, Ben, Meg, and Tim, to play games based on encoding and decoding, sight vocabulary, letter recognition, memory, matching, alphabetizing, and positional words. Eighteen games on five disks offer a broad range in content. Keeps score. Initial adult help required.

Final Rating: 63 ******
User Friendliness: 51 *****
Educational Value: 84 ********
Instructional Design: 70 *******

Title: Representational Play
Company: P.E.A.L. Software
Date: 1985
Price: $150.00
Age: 2-5
Computer: Apple (64K)
Conceptual Area: LA/1,5 SP/7
- Early language acquisition

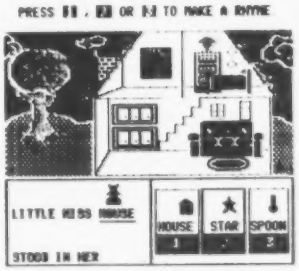
Comments: Two overlays for the Muppet Learning Keys (required). Child first plays with real toys, then presses their pictures on the overlay to hear the associated words in a robotic voice. Requires Echo or Cricket synthesizer. Covers 24 words. Adult setup required.

Final Rating: 71 *******
User Friendliness: 62 ******
Educational Value: 69 *******
Instructional Design: 84 ********

Title: Rhyming to Read
Company: Grolier Electronic Publishing
Date: 1985
Price: $189.00
Age: 4-8
Computer: Apple* C64
Conceptual Area: LA/7
- Rhyming words

Comments: Five disks introducing 60 words in the context of several activites: matching words to pictures, determining if two words rhyme (Y/N keys), finding a rhyming word for a given word. Menus require reading. Little interactivity.

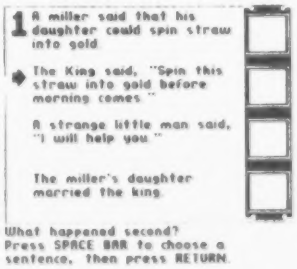
Final Rating: 37 ****
User Friendliness: 32 ***
Educational Value: 52 *****
Instructional Design: 32 ***



Title: Rumpelstiltskin
Company: Troll Associates
Date: 1987
Price: $39.95
Age: 5-8
Computer: Apple
Conceptual Area: LA/10 SP/4
- Reading comprehension

Comments: Three games: Sequencing — child puts eight sentences from "Rumpelstiltskin" in 1-2-3 order. Tic-tac-toe — child answers T/F question to win a square. Following Directions — child moves a marker in a scene, according to written directions, then creates a pattern. Best for ages 6 and up. Includes book.

Final Rating: 43 ****
User Friendliness: 51 *****
Educational Value: 48 *****
Instructional Design: 35 ****


1 A miller said that his daughter could spin straw into gold.
The King said, "Spin this straw into gold before morning comes."
A strange little man said, "I will help you."
The miller's daughter married the king.
What happened second?
Press SPACE BAR to choose a sentence, then press RETURN.

Title: Same or Different
Company: Learning Technologies, Inc.
Date: 1985
Price: $24.95
Age: 4-8
Computer: Apple*, C64
Conceptual Area: CL/1,2
- Visual discrimination, matching

Comments: Child presses a number key to select which of four numbered objects is different from the others in some way or which of four objects matches one shown. Menus require reading. Offers a narrow range in content. Keeps score.

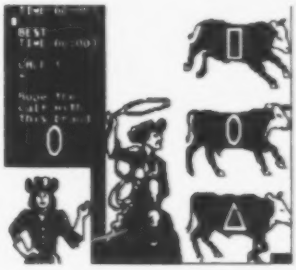
Final Rating: 55 ******
User Friendliness: 45 *****
Educational Value: 68 *******
Instructional Design: 54 *****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Shape & Color Rodeo
Company: DLM
Date: 1984
Price: $32.95
Age: 4-8
Computer: Apple*, IBM, C64
Conceptual Area: CL/1
- Recognizing shapes and colors

Comments: Six activities. Child uses spacebar and RETURN to select matching shapes or colors or to find hidden shapes in a rodeo picture. Lively graphics and sounds. Menu requires reading. For one or two players.

Final Rating: 73 *******
User Friendliness: 62 ******
Educational Value: 92 **********
Instructional Design: 72 *******



Title: Shape Games
Company: BeCi Software
Date: 1983
Price: $19.95
Age: 3-6
Computer: C64*, VIC 20
Conceptual Area: SE/4 CL/2
- Pattern recognition

Comments: Two activities on one disk: One Is Different — child enters number of shape that is different from four others. String a Bead — shows pattern of six beads of different shapes or colors. Child selects seventh from four choices. Blocky graphics. Adult help needed.

Final Rating: 44 ****
User Friendliness: 39 ****
Educational Value: 69 *******
Instructional Design: 34 ***

Title: Shapes & Patterns
Company: Mindscape, Inc.
Date: 1984
Price: $49.95
Age: 3-6
Computer: Apple
Conceptual Area: CL/1,2 SE/2
- Visual discrimination, cognitive skills

Comments: Child uses nodding heads to decide (1) if shapes shown are the same, (2) if there is a common shape among several objects, or (3) if pattern is correct. Easy-to-use format. Utilities provide feedback on last-played round and some selection of difficulty level.

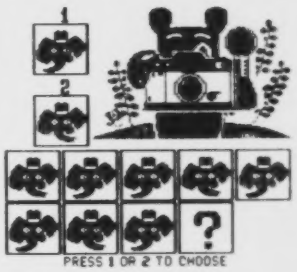
Final Rating: 66 *******
User Friendliness: 80 *********
Educational Value: 72 *******
Instructional Design: 52 *****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Shutterbug's Patterns
Company: Learning Technologies, Inc.
Date: 1985
Price: $24.95
Age: 4-8
Computer: Apple*, C64
Conceptual Area: CL/2
- Sequencing, pattern recognition

Comments: Child sees a series of eight pictures and must select the ninth and tenth of the series. Graphics are distracting. Content is limited.

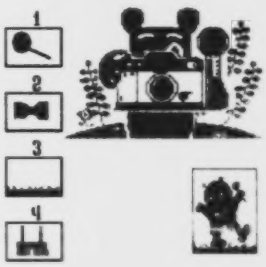
Final Rating: 36 ****
User Friendliness: 56 ******
Educational Value: 32 ***
Instructional Design: 36 ****



Title: Shutterbug's Pictures
Company: Learning Technologies, Inc.
Date: 1985
Price: $24.95
Age: 4-8
Computer: Apple*, C64
Conceptual Area: OT/1
- Memory skills, reading readiness

Comments: One game in which child sees picture, then is flashed the same picture with one element missing. Child uses the number keys to select the missing object. No branching.

Final Rating: 61 ******
User Friendliness: 69 *******
Educational Value: 72 *******
Instructional Design: 51 *****



Title: Simon Says
Company: Sunburst Communications, Inc.
Date: 1987
Price: $65.00
Age: 6-11
Computer: Apple*, C64
Conceptual Area: OT/1 SE/4
- Chaining memory exercise

Comments: Child must re-create sequences of colors, numbers, or letters, which get longer with each correct answer. Options allow child to create the original sequence, select the speed with which it is flashed, or select the letters used. Uses regular keyboard, Muppet keyboard, or Touch Window. Can be played by one to four players.

Final Rating: 85 *********
User Friendliness: 89 *********
Educational Value: 87 *********
Instructional Design: 82 ********

Title: Size and Logic
Company: Hartley Courseware, Inc.
Date: 1984
Price: $35.95
Age: 3-6
Computer: Apple
Conceptual Area: SE/1,2,4 CL/1
- Size discrimination, patterns

Comments: Four games in which child uses spacebar and RETURN to match objects by size, select the object that comes next in a series, or create a matching set. Three levels to each game. Child can use picture menu to select own difficulty level. Clear graphics.

Final Rating: 77 ********
User Friendliness: 69 ********
Educational Value: 91 **********
Instructional Design: 75 *********

Title: SocPix
Company: American Guidance Service
Date: 1985
Price: $49.95
Age: 3-7
Computer: Apple
Conceptual Area: CL/2,4
- Classification (class membership)

Comments: Three activities on one disk. Child uses arrow keys and spacebar to decide whether pictures belong to a given category. Includes 175 pictures in seven categories. A separate record-keeping program ($19.95) keeps records for 40 children.

Final Rating: 61 *******
User Friendliness: 80 *********
Educational Value: 57 *******
Instructional Design: 47 ******

Title: Sound Ideas: Consonants
Company: Houghton Mifflin
Date: 1986
Price: $165.00
Age: 5-6
Computer: Apple (64K)
Conceptual Area: LA/4,5,6
- Consonant sounds

Comments: Seven disks present the "th," "sh," and "ch" and 17 consonants. There are four levels. Child matches a sound (said in a male voice) with a picture, a letter, or a word by using space-bar and RETURN to select a box in a multiple-choice format. Includes workbook and other materials. Requires Echo II + or Cricket synthesizer.

Final Rating: 80 *********
User Friendliness: 79 *********
Educational Value: 88 **********
Instructional Design: 76 *********

Title: Sound Ideas: Vowels
Company: Houghton Mifflin
Date: 1986
Price: $165.00
Age: 5-6
Computer: Apple (64K)
Conceptual Area: LA/4,5,6
- Five vowel sounds (long, short) and y

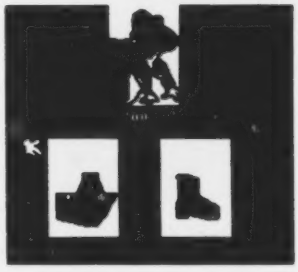
Final Rating: 80 ********
User Friendliness: 79 ********
Educational Value: 88 *********
Instructional Design: 76 ********

Comments: Five disks. Child uses spacebar and RETURN to select one of three objects with the same vowel sound as a picture. Uses spoken (in a male voice) and pictorial examples to illustrate letter/sound correspondence. Includes workbook and other support materials. Requires Echo II + or Cricket voice synthesizer.

Title: Sound Ideas: Word Attack
Company: Houghton Mifflin
Date: 1987
Price: $174.00
Age: 5-6
Computer: Apple (64K)
Conceptual Area: LA/4,5,6
- Consonant blends, clusters, and digraphs

Final Rating: 72 ********
User Friendliness: 71 ********
Educational Value: 94 *********
Instructional Design: 62 *******

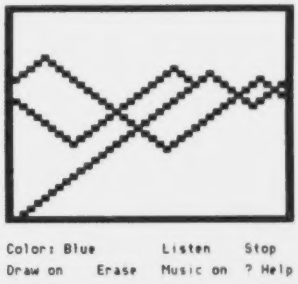
Comments: Six disks. Each disk has three parts: a tutorial, a practice session, and a story. Successful completion of each part is required to get to the next level. Practice session gives child a choice of three games to play. Story puts phonics in sentence context. Workbook and support materials included. Uses male voice. Requires Echo II + or Cricket synthesizer.



Title: Sound Tracks
Company: MECC
Date: 1984
Price: $55.00
Age: 5-11
Computer: Apple (64K)
Conceptual Area: CP/1,2 SE/1
- Making pictures

Final Rating: 74 ********
User Friendliness: 62 *******
Educational Value: 75 *********
Instructional Design: 84 *********

Comments: Two activites on one disk:
(1) Sound Doodles turns the keyboard into a piano. Pressing a key makes a randomly placed colored bar, line, or picture appear.
(2) Sound Images lets child create pictures with blocks. Each block has a tone. Pictures can be saved on disk.



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Space Chase
Company: EMC Publishing
Date: 1984
Price: $29.95
Age: 5-10
Computer: Apple
Conceptual Area: SP/4
- Spatial relationships

Final Rating: 31 ***
User Friendliness: 37 ****
Educational Value: 30 ***
Instructional Design: 25 ***

Comments: Offers practice with spatial terms, e.g., tall/short, over/under, in/on. Child blows up spaceship that lands in/on an object. A wrong answer destroys child's spaceship. Child gets four ships. Child presses 1 or 2 to select word on screen. Little child-control.

Title: Space Waste Race
Company: Sunburst Communications, Inc.
Date: 1984
Price: $65.00
Age: 3-7
Computer: Apple*, Atari, TRS 80
Conceptual Area: LA/8 NB/3,4 SP/4
- Letter/numeral recognition

Final Rating: 49 *****
User Friendliness: 44 ****
Educational Value: 57 ******
Instructional Design: 47 *****

Comments: Consists of an animated musical storybook with theme-related drill-and-practice activities on counting, letter/numeral recognition, and spatial concepts. Reading required.

Title: Spaceship Lost
Company: Educational Activities
Date: 1984
Price: $59.95
Age: 4-6
Computer: Apple
Conceptual Area: SP/3
- Spatial relationships

Final Rating: 45 *****
User Friendliness: 28 ***
Educational Value: 63 ******
Instructional Design: 49 *****

Comments: Child moves captain through simple maze by typing first letter of direction term. Reading required. Two levels of difficulty: one with captain taking child's perspective each time, and one with child taking captain's perspective. Simple design of graphics limits the program.

Title: Spatial Relationships
Company: Aquarius
Date: 1982
Price: $29.95
Age: 3-6
Computer: Apple
Conceptual Area: SP/4
- Spatial relationships

Comments: Child moves an animated spider in or around three boxes on screen, using U (up), L (left), R (right), and D (down) keys. Must read written prompt, e.g., "Put Spidy inside the medium-sized box." Some content not accurate. Not recommended. Discontinued.

Final Rating: 25 ***
User Friendliness: 33 ***
Educational Value: 30 ***
Instructional Design: 17 **

Title: Spellicopter
Company: Designware
Date: 1983
Price: $39.95
Age: 6-10
Computer: Apple*, IBM, C64 ($29.95)
Conceptual Area: LA/5 SP/4
- Spelling practice

Comments: Child pilots helicopter (using joystick or arrow keys) over obstacles to pick up scattered letters of a spelling word. A sentence is given for a clue. Up to 400 words are available (40 lists of 10 words).

Final Rating: 66 *******
User Friendliness: 59 ******
Educational Value: 77 ********
Instructional Design: 64 ******

Title: Spelling and Reading Primer
Company: EduWare
Date: 1982
Price: $39.95
Age: 4-8
Computer: Apple*, IBM, C64
Conceptual Area: LA/5
- Spelling and reading practice

Comments: Two activities: Reading Primer — child uses spacebar to move cursor to match word with one of three line-drawings. Spelling Primer — child sees drawing and must type in word. Twenty-two word-lists with 350 words ranging from "pin" to "circle." Keeps a running record for one child.

Final Rating: 51 *****
User Friendliness: 46 *****
Educational Value: 65 *******
Instructional Design: 48 *****

Title: Spelling Bee, The
Company: Troll Associates
Date: 1985
Price: $39.95
Age: 5-6
Computer: Apple
Conceptual Area: LA/5
- Spelling skills

Final Rating: 32 ***
User Friendliness: 34 ***
Educational Value: 37 ****
Instructional Design: 24 **

Comments: Consists of a book, disk, and cassette tape. Three games: (1) child sees three words, e.g., fan/me/mine, and selects one that is different; (2) child changes word to match picture; and (3) child matches picture to word. Reading required. Limited content. Cluttered graphics.

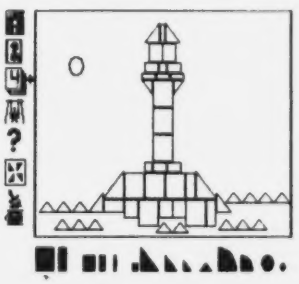
Title: Starting Out: Set 1
Company: NTS Software
Date: 1980
Price: $30.00
Age: 3-6
Computer: Apple*, TRS 80
Conceptual Area: NB/3,4
- Counting, basic facts

Final Rating: 45 *****
User Friendliness: 54 *****
Educational Value: 46 *****
Instructional Design: 38 ****

Comments: This is the first of a set of five. Contains four drill-and-practice games based on number concepts: Dice n' Dominoes, Adding, Sequences (32,__,33,34), and How Many (members in a set). Single-lesson records are kept. No branching or escape to menu.

Title: Stickers
Company: Springboard
Date: 1984
Price: $34.95
Age: 4-12
Computer: Apple, IBM*, C64
Conceptual Area: CP/1,4 SP/1,2,8
- Creative activity

Final Rating: 84 ********
User Friendliness: 75 ********
Educational Value: 86 *********
Instructional Design: 92 *********

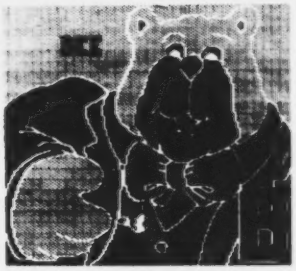


Comments: Using arrow keys or joystick, child moves geometric shapes on screen to either match existing patterns or create own. Easy-to-use picture menu requires no reading. Keyboard or joystick can be used.

Title: Stickybear ABC
Company: Weekly Reader Software
Date: 1982
Price: $39.95
Age: 3-6
Computer: Apple*, Atari, C64
Conceptual Area: LA/4
- Letter recognition

Comments: Child presses any letter key to get one of two animated pictures related to letter. Easy-to-use program, but little challenge. Entertaining graphics.

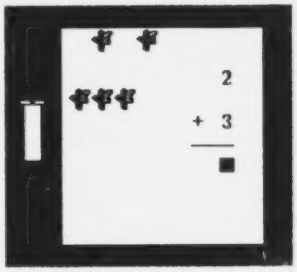
Final Rating: 59 ******
User Friendliness: 76 ********
Educational Value: 53 *****
Instructional Design: 55 ******



Title: Stickybear Math
Company: Weekly Reader Software
Date: 1984
Price: $39.95
Age: 6-9
Computer: Apple*, IBM, C64
Conceptual Area: NB/3,4,7
- Counting, addition and subtraction

Comments: A 20-level math program that keeps names, levels, scores, and types of problems for up to 25 children. Automatically tracks and adjusts difficulty level. Content ranges from counting to three-place vertical-presentation subtraction with borrowing. Includes poster and stickers. Animated graphics illustrate problems.

Final Rating: 81 ********
User Friendliness: 70 *******
Educational Value: 90 **********
Instructional Design: 82 ********



Title: Stickybear Numbers
Company: Weekly Reader Software
Date: 1982
Price: $39.95
Age: 3-6
Computer: Apple*, IBM, Atari, C64
Conceptual Area: NB/3,4,7
- Counting

Comments: A continuous series of 25 counting activities controlled by the spacebar and number keys. Provides good number concept reinforcement, as there are 25 possible entertaining combinations. No CMI techniques used. Limited content.

Final Rating: 64 ******
User Friendliness: 56 ******
Educational Value: 84 ********
Instructional Design: 59 ******

Title: Stickybear Opposites
Company: Weekly Reader Software
Date: 1983
Price: $39.95
Age: 3-6
Computer: Apple*, Atari, C64
Conceptual Area: SP/4 SE/1
- Opposites, e.g., "near/far"

Comments: The Stickybear series offers a book, a poster, and suggestions for extending concepts into non-computer contexts. "Stickybear Opposites" contains 21 antonym pairs that are changed using the arrow keys. Spacebar changes scene. Colorful graphics and animation.

Final Rating: 73 *******
User Friendliness: 75 ********
Educational Value: 79 ********
Instructional Design: 68 *******

Title: Stickybear Printer
Company: Weekly Reader Software
Date: 1985
Price: $39.95
Age: 5-up
Computer: Apple
Conceptual Area: CP/4 OT/4
- "Printing fun for everyone"

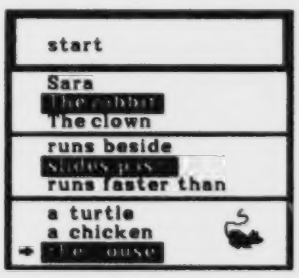
Comments: Allows creation of cards, stories, or posters. Multiple-menu design requires reading, limiting independent use by non-readers. Can utilize Imagewriter II color printer. A second package, "Stickybear Printer Picture Library" ($39.95), contains two disks of additional graphics.

Final Rating: 43 ****
User Friendliness: 40 ****
Educational Value: 36 ****
Instructional Design: 49 *****

Title: Stickybear Reading
Company: Weekly Reader Software
Date: 1984
Price: $39.95
Age: 5-8
Computer: Apple*, IBM, C64
Conceptual Area: LA/5,8,10
- Word and sentence fun

Comments: Three activities: Child can use joystick, arrow keys, or mouse to match words with pictures, complete a sentence, or build a sentence by selecting its parts. Graphics animate each sentence or word used. Includes book and poster.

Final Rating: 77 ********
User Friendliness: 68 *******
Educational Value: 89 *********
Instructional Design: 78 ********



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Stickybear Shapes
Company: Weekly Reader Software
Date: 1983
Price: $39.95
Age: 3-6
Computer: Apple*, Atari, C64
Conceptual Area: SP/8
- Shape Identification

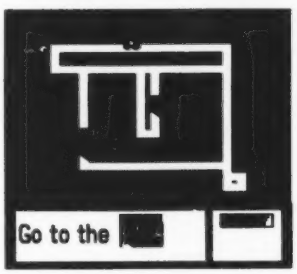
Comments: The Stickybear series offers a book, a poster, and suggestions for extending concepts into noncomputer contexts. This program provides practice with five common shapes in three games: Pick It, Name It, and Find It. Paddles, arrow keys, or mouse can operate program.

Final Rating: 70 *******
User Friendliness: 56 ******
Educational Value: 80 ********
Instructional Design: 78 ********

Title: Stickybear Town Builder
Company: Weekly Reader Software
Date: 1984
Price: $39.95
Age: 6-9
Computer: Apple*, C64
Conceptual Area: SP/3,4,6,7 TI/5,6 CL/2
- Map skills

Comments: Using joystick or arrow keys, child makes a town by placing one of 30 buildings on an empty map. The child can then drive car to find buildings in a matching game or to find hidden keys in the town. Towns can be saved. Joystick and color monitor recommended.

Final Rating: 80 ********
User Friendliness: 68 *******
Educational Value: 97 **********
Instructional Design: 80 ********



Title: Stickybear Typing
Company: Weekly Reader Software
Date: 1985
Price: $39.95
Age: 5-8
Computer: Apple*, IBM, C64
Conceptual Area: LA/4
- Typing skills

Comments: Three activities give child practice with (1) finding letters with correct fingers, (2) building speed, and (3) typing stories. Includes 30 levels of difficulty, records scores, and gives WPM score. Slow key/screen response. Reading required.

Final Rating: 42 ****
User Friendliness: 49 *****
Educational Value: 41 ****
Instructional Design: 37 ****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Story Machine
Company: Spinnaker Software Corp.
Date: 1982
Price: $29.95
Age: 5-9
Computer: Apple*, IBM, Atari, C64, TI
Conceptual Area: LA/4,8,9 CP/4
- Creative activity

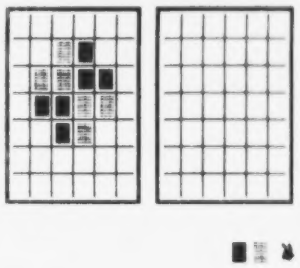
Comments: Provides medium for child to animate written words. By typing "the cat walks to the store," a child can make a cat appear and walk to the store. Limited words are available, which reduces the usefulness of the program. Stories cannot be printed but can be saved on disk. Reading required.

Final Rating: 69 *******
User Friendliness: 39 ****
Educational Value: 80 ********
Instructional Design: 91 *********

Title: Surrounding Patterns
Company: Strawberry Hill Software
Date: 1985
Price: $19.00
Age: 3-10
Computer: Apple*, C64
Conceptual Area: SP/1,2,3,4,8,9 CP/1,4
- Visual imagery, symmetry

Comments: Child sees a pattern of colored shapes and uses joystick or arrow keys to copy it. Seven levels are available, or child can make own designs, which can be saved. Program design is easy to use and encourages experimentation.

Final Rating: 77 ********
User Friendliness: 75 ********
Educational Value: 98 **********
Instructional Design: 65 *******



Title: Sweet Shop, The
Company: D.C. Heath & Company
Date: 1983
Price: $60.00
Age: 3-8
Computer: Apple
Conceptual Area: NB/3
- Number matching, basic facts

Comments: Child moves Mr. Jellybean with arrow keys to match numbers with jellybeans or select addition or subtraction answer. No tutorial steps or branching. All activities based on jellybeans, popcorn, or ice cream themes.

Final Rating: 54 *****
User Friendliness: 78 ********
Educational Value: 41 ****
Instructional Design: 43 ****

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Talk About a Walk
Company: Intellectual Software
Date: 1984
Price: $39.95
Age: 4-6
Computer: Apple
Conceptual Area: LA/1,5 CL/2 SP/6
- Classifying household objects

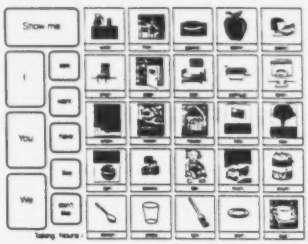
Comments: Two activites in which child sees one of 20 household items or words (spoon) and must place it in one of four rooms of a house. The second activity shows objects inside or outside a house. Child must press any key to indicate if the object is in the correct place.

Final Rating: 56 ******
User Friendliness: 59 ******
Educational Value: 69 *******
Instructional Design: 46 *****

Title: Talking Nouns I
Company: Laureate Learning Systems
Date: 1987
Price: $100.00
Age: 2.5-up
Computer: Apple (128K)
Conceptual Area: LA/5,8 CL/1,2
- Language development

Comments: On an overlay for the Touch Window (required), child presses a picture to hear its name said in a clear female voice (Echo or Cricket speech synthesizer required). Other words allow creation of simple sentences, e.g., "You see the bus." Fifty nouns available. Recommended for nonverbal children. Adult setup required.

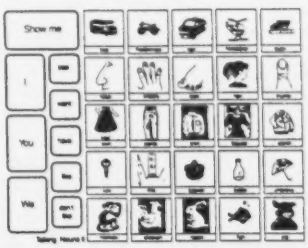
Final Rating: 80 ********
User Friendliness: 95 **********
Educational Value: 87 *********
Instructional Design: 65 *******



Title: Talking Nouns II
Company: Laureate Learning Systems
Date: 1987
Price: $100.00
Age: 2.5-up
Computer: Apple (128K)
Conceptual Area: LA/5,8 CL/1,2
- Language development

Comments: On an overlay for the Touch Window (required), child presses a picture to hear its name said in a clear female voice (Echo or Cricket speech synthesizer required). Other words allow creation of simple sentences, e.g., "You see the bus." Fifty nouns available. Recommended for nonverbal children. Adult setup required.

Final Rating: 80 ********
User Friendliness: 95 **********
Educational Value: 87 *********
Instructional Design: 65 *******



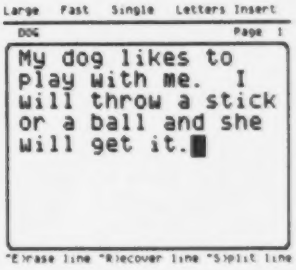
Title: Talking Teacher
Company: Firebird Licensees Inc.
Date: 1985
Price: $39.95
Age: 2-8
Computer: C64
Conceptual Area: LA/4,5,6 CL/2
- Letter identification

Final Rating: 76 ********
User Friendliness: 56 *******
Educational Value: 87 *********
Instructional Design: 82 ********

Comments: Three games on one disk "talk" in a fairly clear man's voice. No special hardware is needed. Game 1 says and writes any letter typed. Game 2 asks child to find a letter on the keyboard, giving verbal clues if necessary. Game 3 asks child to identify the beginning letter of a word. Fast-loading. Uses a two-sided disk.

Title: Talking Textwriter
Company: Scholastic Software, Inc.
Date: 1986
Price: $149.95
Age: 3-9
Computer: Apple (128K), Apple IIGS, IBM
Conceptual Area: LA/3,4,5,6,7,9 CP/4 OT/4
- Exploration of written language

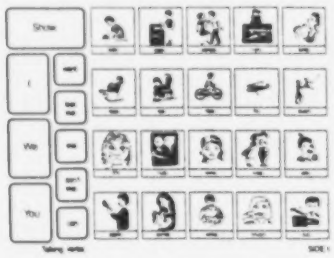
Final Rating: 80 ********
User Friendliness: 58 *******
Educational Value: 95 **********
Instructional Design: 90 **********


Large Fast Single Letters Insert
DOG
Page 1
My dog likes to play with me. I will throw a stick or a ball and she will get it.
^Erase line ^Recover line ^Split line

Comments: A large-print word processor that says letters, words, or sentences as they are typed. Requires Echo II or Cricket ($50 extra). Stories can be saved and printed. Requires adult setup. Comes on two disks. Apple IIGS and IBM versions do not require the Echo.

Title: Talking Verbs
Company: Laureate Learning Systems
Date: 1987
Price: $100.00
Age: 2.5-up
Computer: Apple (128K)
Conceptual Area: LA/5,8 CL/1,2
- Language development

Final Rating: 80 ********
User Friendliness: 95 **********
Educational Value: 87 *********
Instructional Design: 65 *******



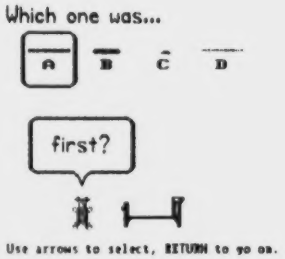
Comments: On an overlay for the Touch Window (required), child presses a verb picture (such as crying or talking). For picture pressed, word is said in a female voice (Echo or Cricket required). Forty verbs and key-phrase words included. Adult setup required. Recommended for nonverbal children.

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Teddy and Iggy
Company: Sunburst Communications, Inc.
Date: 1987
Price: $65.00
Age: 6-8
Computer: Apple*, C64
Conceptual Area: CL/1 OT/1
- Sequential memory practice

Comments: Three activities on one disk. Child must re-create order in which Teddy made his bed (recalling which color of sheet went on first), recall sequence in which several objects were flashed, or recall the order in which several boxes were opened. Uses keyboard, Muppet keyboard, or Touch Window. Requires reading, color monitor.

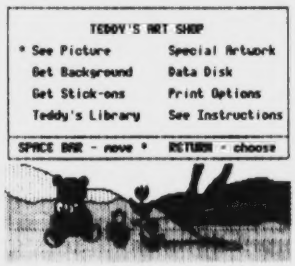
Final Rating: 81 ********
User Friendliness: 76 ********
Educational Value: 90 *********
Instructional Design: 80 ********



Title: Teddy Bear-rels of Fun
Company: DLM
Date: 1987
Price: $39.95
Age: 5-up
Computer: Apple*, C64
Conceptual Area: CP/1,4 LA/3 SP/2
- Creating pictures, graphics, and stories

Comments: Child uses spacebar, RETURN, and arrow keys to create scenes with teddy bears. Includes over 200 pictures, backgrounds, and props that a child can arrange on the screen. Rather complex menus (a child must type CONTROL-C to go back) are better-suited to older children. Work can be saved or printed in color.

Final Rating: 56 ******
User Friendliness: 37 ****
Educational Value: 74 *******
Instructional Design: 62 ******



Title: Teddy Bears Counting Fun
Company: Micro-Learningware
Date: 1981
Price: $30.00
Age: 3-6
Computer: Apple
Conceptual Area: NB/3
- Counting skills

Comments: Presents nine scenes in which child counts bears (a random number between 1-9 appears), "reads" poem, and inputs number. No CMI techniques. Very limited content. Not recommended.

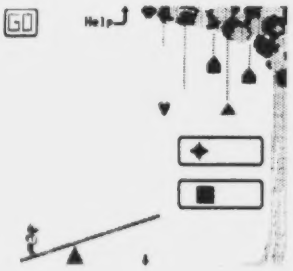
Final Rating: 32 ***
User Friendliness: 45 *****
Educational Value: 30 ***
Instructional Design: 27 ***

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Teddy's Playground
Company: Sunburst Communications, Inc.
Date: 1985
Price: $65.00
Age: 5-9
Computer: Apple
Conceptual Area: CL/2
- Practice with color and shape attributes

Comments: Child uses joystick, mouse, or arrow keys to move freely around three main areas of Teddy's playground to arrange pieces by shape, color, or shading. Includes supplementary materials. Similar in design to "Gertrude's Secrets." Color monitor required.

Final Rating: 83 ********
User Friendliness: 84 ********
Educational Value: 94 *********
Instructional Design: 76 ********



Title: Telling Time
Company: Orange-Cherry Media
Date: 1984
Price: $39.00
Age: 5-9
Computer: Apple*, C64, TRS 80, IBM, Atari, Pet
Conceptual Area: TI/9
- Clock practice

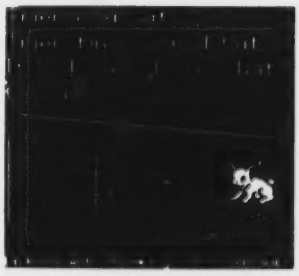
Comments: Provides practice with clock-reading skills. Multiple-choice questions are presented concerning the time shown on a rough clock. Child enters answer by typing letter. Reading required. A better clock-reading program is in "Learning About Numbers" by C&C Software.

Final Rating: 34 ***
User Friendliness: 31 ***
Educational Value: 31 ***
Instructional Design: 37 ****

Title: Tiger's Tales: A Reading Adv.
Company: Sunburst Communications, Inc.
Date: 1986
Price: $65.00
Age: 5-7
Computer: Apple*, C64
Conceptual Area: LA/5,8
- Reading vocabulary & comprehension

Comments: Five interactive stories in which child selects pictures related to the story. Includes a picture/word matching activity. Large, easy-to-read letters. Supplementary worksheets and activities are included. Can be used with Muppet Learning Keys. Reading required.

Final Rating: 80 ********
User Friendliness: 66 *******
Educational Value: 94 *********
Instructional Design: 83 ********



Title: Time Master
Company: Micro Power & Light
Date: 1980
Price: $29.95
Age: 5-7
Computer: Apple
Conceptual Area: TI/9
- Clock practice

Comments: Child must be able to read "set hand to half past seven" to use this program. Hands are moved with arrow keys. Choices are hours, half hours, quarter hours, minutes, or start and set the clock. Poor design. Not recommended.

Final Rating: 25 ***
User Friendliness: 28 ***
Educational Value: 38 ****
Instructional Design: 16 **

Title: Tink's Adventure
Company: Mindscape, Inc.
Date: 1984
Price: $29.95
Age: 4-8
Computer: Apple*, C64, IBM, Atari
Conceptual Area: LA/4 SP/4,7
- Key location, alphabetical order

Comments: Five games on one disk, designed to give practice with alphabet order (e.g., F,G,__,I) and key location. Games are played by using joystick or arrow keys to steer "Tink's" boat or helicopter to various islands. Most games are not at a preschool level. Color monitor recommended.

Final Rating: 41 ****
User Friendliness: 48 *****
Educational Value: 54 *****
Instructional Design: 28 ***

Title: Tink's Subtraction Fair
Company: Mindscape, Inc.
Date: 1985
Price: $29.95
Age: 4-8
Computer: Apple*, C64, IBM, Atari
Conceptual Area: NB/3,7,8 OT/1 SP/7
- Subtraction skills, concepts of money

Comments: Child uses arrow keys or joystick to steer "Tonk" through the midway of a fair. As he proceeds, Tonk can stop at one of seven tents to play subtraction games, earning tokens that allow entry into game tents. Three difficulty levels. Menus require reading.

Final Rating: 59 ******
User Friendliness: 49 *****
Educational Value: 67 *******
Instructional Design: 47 *****

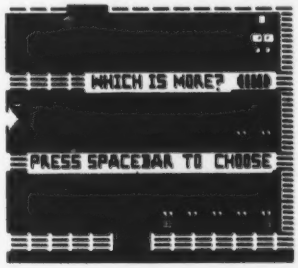
LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

111

Title: Tinka's Mazes
Company: Mindscape, Inc.
Date: 1986
Price: $29.95
Age: 4-8
Computer: Apple*, IBM, C64, Atari
Conceptual Area: NB/1,3,4,9 SP/7
- Strengthen mathematical skills

Comments: Child uses joystick or arrow keys to stear "Tinka" through a maze to answer math problems and avoid obstacles. Four levels offer practice with "more" or "less," single-digit addition, counting, and double-digit addition. Many menus require adult or reader help. Best for home use.

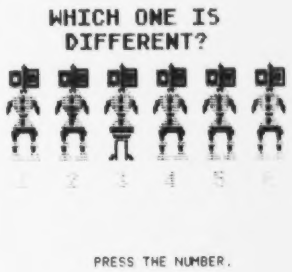
Final Rating: 43 ****
User Friendliness: 49 *****
Educational Value: 48 *****
Instructional Design: 32 ***



Title: Tonk in the Land of Buddy-Bots
Company: Mindscape, Inc.
Date: 1984
Price: $29.95
Age: 4-8
Computer: Apple*, C64, IBM, Atari
Conceptual Area: SP/1,5,7 OT/1
- Problem solving

Comments: Child uses joystick or arrow keys to move "Tonk" through a 65-screen landscape filled with robot parts, sky holes, and enemy soldiers. Along the way, Tonk can stop to play one of six games on memory, matching, and spatial relations. Joystick use is optional.

Final Rating: 56 ******
User Friendliness: 54 *****
Educational Value: 66 *******
Instructional Design: 49 *****



Title: Touch & Write
Company: Sunburst Communications, Inc.
Date: 1986
Price: $75.00
Age: 5-7
Computer: Apple
Conceptual Area: LA/4,5
- Printing practice

Comments: Child touches screen (Touch Window required) to make letters. Contains 4 stroke lessons and 19 letter lessons, based on the Palmer Manuscript style. Allows flexibility in design. Child can practice strokes, letters, or words. Work can be printed.

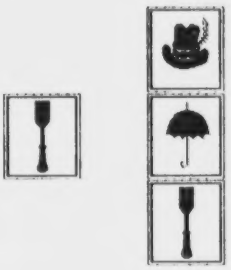
Final Rating: 85 *********
User Friendliness: 96 **********
Educational Value: 94 *********
Instructional Design: 71 *******

LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: Touch and Match
Company: E.C.S.
Date: 1986
Price: $29.95
Age: 3-6
Computer: Apple
Conceptual Area: CL/2,4
- Classification

Comments: Child needs only touch the screen (Touch Window required) to identify identical, associated, or different pictures among four that are shown. Menu requires reading. Some setup required by adult. Clear but limited graphics. Easy for a child to use.

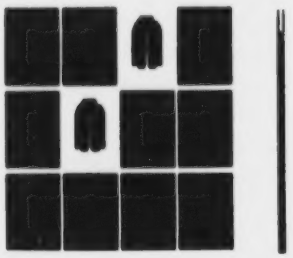
Final Rating: 65 *******
User Friendliness: 62 ******
Educational Value: 78 ********
Instructional Design: 59 ******



Title: Touch and See
Company: E.C.S.
Date: 1986
Price: $39.95
Age: 4-7
Computer: Apple
Conceptual Area: OT/1 CL/2
- Memory skills

Comments: A memory game in which children match six pairs of shapes, letters, pictures, or words hidden in 12 boxes. Timer shows time limit. Child touches screen to make matches. Touch Window required. Written menus.

Final Rating: 61 ******
User Friendliness: 59 ******
Educational Value: 80 ********
Instructional Design: 49 *****



Title: Toybox
Company: S.D.L.
Date: 1986
Price: $10.00
Age: 1/2-up
Computer: C64*, Apple (128), IBM
Conceptual Area: TI/1 CP/1,2,4
- Exploration of the computer

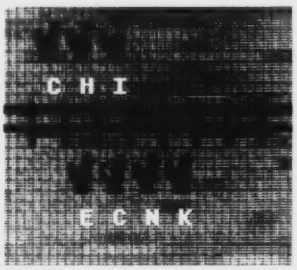
Comments: Each keystroke puts a different shape, color, or special effect on the screen in a random position. Effects accumulate on the screen, creating a composition that can be saved on the disk. Extremely easy to use.

Final Rating: 73 *******
User Friendliness: 84 ********
Educational Value: 72 *******
Instructional Design: 67 *******

Title: Tuk Goes to Town
Company: Mindscape, Inc.
Date: 1984
Price: $29.95
Age: 4-8
Computer: Apple*, C64, IBM, Atari
Conceptual Area: LA/4,5,11 SP/4
- Develops spelling and vocabulary

Comments: Seven games on one disk designed to give practice unscrambling or matching shapes or letters. Games take place in an interactive story that feature "Tuk" on his way to town. Some instructions are confusing. Games are not appropriate for the early childhood level. Color monitor required.

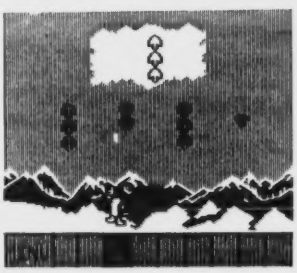
Final Rating: 41 **
User Friendliness: 44 **
Educational Value: 59 ****
Instructional Design: 29 *



Title: Up & Add 'Em
Company: Spinnaker Software Corp.
Date: 1984
Price: $9.95
Age: 3-7
Computer: Apple*, IBM, C64
Conceptual Area: NB/1,3,4,7
- Matching numbers

Comments: Child completes a rainbow by using joystick or arrow keys to match numbers to sets, match sets, or do simple addition or subtraction problems. Four levels (9-4 = 5 most difficult). Allows high level of child-control. IBM version comes on the back of the Apple disk.

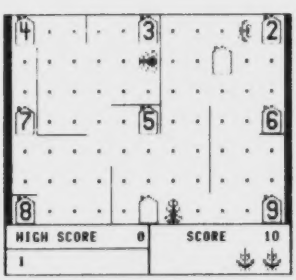
Final Rating: 75 ******
User Friendliness: 82 ******
Educational Value: 86 ********
Instructional Design: 61 ****



Title: Webster's Numbers
Company: EduWare
Date: 1983
Price: $39.95
Age: 4-8
Computer: Apple*, C64
Conceptual Area: NB/3,4 SP/1,2,4
- Basic math concepts

Comments: Four games: Ribbet — child moves through maze to catch numerals 1-9 in order. Balloon Race — child steers balloons to numerals to match a set. Shape Up — child moves shapes to match a model. Pushover — child unscrambles number blocks. Joystick or paddles required.

Final Rating: 67 *****
User Friendliness: 56 ****
Educational Value: 86 ********
Instructional Design: 65 *****



LA = Language CP = Creative Projects OT = Other Topics CL = Classification SP = Spatial Relations TI = Time NB = Number SE = Seriation * = Version Reviewed NA = Not Applicable

Title: What's in a Frame?
Company: Sunburst Communications, Inc.
Date: 1987
Price: $65.00
Age: 5-11
Computer: Apple
Conceptual Area: OT/1 CL/1,4
- Memory practice by context clues

Comments: Two activities. Did You See This? — frame shows several objects for a timed period. Then one object at a time is shown, and child must decide if it was in the original frame. What's in a Frame? — from given objects, child marks ones that were in an original frame. Keeps records. Touch Window optional.

Final Rating: 83 ********
User Friendliness: 76 ********
Educational Value: 86 **********
Instructional Design: 66 *******

Title: Word Factory
Company: Island Software
Date: 1983
Price: $25.00
Age: 3-6
Computer: Apple
Conceptual Area: CL/2
- Word discrimination

Comments: Child uses < or > keys to discriminate between matching words. Leaves child with little control. Limited in content. Poor design. Not recommended.

Final Rating: 22 **
User Friendliness: 25 ***
Educational Value: 26 ***
Instructional Design: 12 *

Title: Words
Company: Lawrence Hall of Science
Date: 1984
Price: $34.95
Age: 4-6
Computer: Apple
Conceptual Area: LA/4,5,8
- Letter disc., word experiences

Comments: Presents three games, two on letter recognition and one on simple sentence structure. Kindergarten children were able to use the Funny Letters and Words activity. Activities effectively focus on the attributes of letters. Best for 5-year-olds. Some reading used, e.g., "Press Return."

Final Rating: 61 ******
User Friendliness: 49 *****
Educational Value: 88 **********
Instructional Design: 57 ******

Title: **Writing to Read 2.0**
Company: IBM Educational Systems
Date: 1982
Price: $580.00
Age: 5-6
Computer: IBM
Conceptual Area: LA/4,5,6
- Reading skills

Final Rating: **45** *****
User Friendliness: **32** ***
Educational Value: **74** *******
Instructional Design: **41** ****

Comments: A fourteen-disk computer-based curriculum designed to teach reading skills through writing, using phonetic spelling. Computers are only one component. Each disk covers three words. Child hears letter or word and must type. Voice synthesizer required. Ratings apply only to software.

3

EVALUATION PROCESS

This chapter contains the Early Childhood Software Evaluation Instrument that was developed to

1. Focus specifically on the early childhood category of software, covering issues important when working with three- to six-year-old children

2. Generate numerical values in both specific and general categories to provide quick comparison of software packages

3. Record descriptive information about specific programs for purposes of recommendation, prescription, and documentation

Thirteen separate percentage scores ranging from 1 to 100 are generated by the Instrument and are defined in Calculation of a Component Score, found in this chapter, and Guide to the Software Descriptions, found in Chapter 1.

Terms used in the Instrument that may be unfamiliar to the reader have been included in the Glossary (Appendix 5).

EARLY CHILDHOOD SOFTWARE EVALUATION INSTRUMENT

© 1985 High/Scope Educational Research Foundation

Title _____

Company _____

Author(s) _____

Address _____

_____

_____

Phone 1 (____) ____/____ _____ _____

Phone 2 (____) ____/_____

Date _____

Age-range _____

Price _____

Notes:

SUMMARY OF RATINGS

Minimum User Competency ____%

Menu Design ____%

Technical Features ____%

Content Presentation ____%

Content Strength ____%

Ease of Use ____%

Feedback ____%

Embedded Reinforcements ____%

CMI Techniques ____%

User Friendliness ____%

Educational Value ____%

Instructional Design ____%

OVERALL RATING ____%

Computer

____ Apple II	____ IBM PC	____ C64	____ Atari 600	____ TRS 80
____ Apple II +	____ IBM PC jr	____ C128	____ Atari 1200	____ MacIntosh
____ Apple IIe	____ Acorn	____ PET	____ Atari 130XE	____ Apple IIGS
____ Apple IIc	____ Adam	____ Amiga	____ Other	

Components

____ 5¼" disk
____ 3½" disk
____ ROM cartridge
____ Classroom applications
____ User's guide
____ Warranty (list terms)

Peripherals

Req.		Opt.
____	Keyboard	____
____	Color monitor	____
____	Joystick(s)	____
____	Paddle(s)	____
____	Mouse	____
____	Muppet keyboard	____
____	Koala Pad	____
____	Touch Window	____
____	Voice synthesis	____
____	Printer	____
____	Other (specify):	

Intentions

____ Specified by developer
____ Inferred by analyst

"This program is designed to provide experience with
____ counting skills."
____ letter recognition skills."
____ matching or discrimination skills."
____ computer skills."
____ a medium for creative activity."

List the specific objectives of the program:

Mode of Interaction

____ Drill and practice
____ Tutorial
____ Gaming
____ Simulation
____ Problem solving
____ Open-ended/divergent

Summary of program: Provide a concise summary of the program's main points, content features, strengths, and weaknesses.

Classroom Observations

Conceptual Areas

Check the item(s) present in the program.

LANGUAGE (LA)

1 ___ Describing objects, events, and relations
2 ___ Describing feelings, one's own and others'
3 ___ Having one's own spoken language written and read aloud
4 ___ Recognizing letters
5 ___ Recognizing words — matching written words
6 ___ Matching sounds and symbols
7 ___ Matching rhyming words
8 ___ Using language to specify actions: sit, run fast, slow, into, toward, etc.
9 ___ Writing stories
10 ___ Following a simple (2- or 3-step) sequence of oral or written directions

NUMBER (NB)

1 ___ Comparing amounts: more, less, same
2 ___ Arranging two sets of symbols in one-to-one correspondence
3 ___ Counting objects; counting by 2s.
4 ___ Recognizing numerals
5 ___ Estimating the number of objects
6 ___ Measuring (length) using units
7 ___ Combining groups of objects; taking objects away
8 ___ Recognizing and naming the numerals 1, 2, 3, etc.

CLASSIFICATION (CL)

1 ___ Identifying attributes of things: color, shape, size, function
2 ___ Identifying how things are the same or different; sorting and matching
3 ___ Describing objects in different ways; sorting and re-sorting
4 ___ Identifying attributes an object does not possess; finding the object that does not belong to a set
5 ___ Holding more than one attribute in mind at a time
6 ___ Distinguishing between "all" and "some"

TIME (TI)

1 ___ Stopping and starting an action on signal
2 ___ Observing and describing changes
3 ___ Experiencing and describing different rates of speed
4 ___ Experiencing and describing time intervals — long, short, comparative terms
5 ___ Anticipating future events and making appropriate preparations
6 ___ Identifying the order of a sequence of events; reversing the order of events — before, after, at the same time
7 ___ Comparing the duration of events occurring at the same time — longer, shorter, etc.
8 ___ Using a timer to measure the duration of events
9 ___ Reading time from clocks and watches

SPATIAL RELATIONS (SP)

1 ___ Fitting things together and taking them apart
2 ___ Rearranging and reshaping objects
3 ___ Identifying things from different points of view
4 ___ Experiencing and describing the relative positions, directions, and distances of things — inside, outside, above, below, before, behind, on, under, toward, away
5 ___ Identifying and naming body parts: head, legs, arms, etc.
6 ___ Locating things in the classroom or school on simple maps
7 ___ Interpreting representations of spatial relations in drawings and pictures
8 ___ Distinguishing and describing shapes — circle, square, triangle, doughnut (open & closed shapes)
9 ___ Identifying and reversing spatial order
10 ___ Identifying shapes produced by cuts and folds

SERIATION (SE)

1 ___ Making comparisons — shape, shades of color, pitch, and/or speed
2 ___ Arranging several things in order and describing their relations by size, color, etc.
3 ___ Fitting one ordered set of objects to another through trial and error
4 ___ Inserting objects into an ordered sequence

CREATIVE PROJECTS (CP)

1 ___ Drawing pictures
2 ___ Creating sounds or music
3 ___ Programming
4 ___ Designing, changing, and printing a plan or product

OTHER TOPICS (OT)

1 ___ Practicing memory skills
2 ___ Recognizing and naming the parts of the computer
3 ___ Typing or practicing keyboard skills
4 ___ Making signs, word processing, or keeping records. (Of potential use to preschool and kindergarten teachers.)

User Friendliness

Minimum User Competency

When considering the portions of the program designed or intended for the child's use, rate the method in which the child's answers are entered into the computer. (Numbers indicate the method's point-value.)

9 ___ Touch screen or use voice.
8 ___ Touch any key or one key.
7 ___ Move the cursor to a visual representation (icon) using a joystick, graphics tablet, light pen, or mouse.
6 ___ Use only 1-4 keys on the keyboard consistently, e.g, spacebar and RETURN.
5 ___ Move the cursor with the arrow keys.
4 ___ Find and press one of the number keys and/or RETURN.
3 ___ Find and press one of the letter keys and/or RETURN.
2 ___ Type in a word/RETURN.
1 ___ Press more than one key simultaneously, e.g., CONTROL-C.

Menu Design

6 ___ Picture or talking menu, touch screen to make the selection.
5 ___ Picture or talking menu, move cursor to selection with peripheral device, such as a joystick or a mouse.
4 ___ Picture or talking menu, move cursor to selection with arrow keys/RETURN to make the selection.
3 ___ Picture or talking menu, press specific key to make choice (e.g., a number key).
2 ___ Simple written menu, with less than six choices, using large letters.
1 ___ Written menu with more than six choices or small letters.

Technical Features

	always	some extent	never	N/A
• Program instructions can be reviewed on the screen				
• When a child holds a key down, only one input is sent to the computer, except where intended, such as in a drawing program				
• Getting to the part of the program to be used by the child requires only inserting a disk and starting the computer				
• If there are data files, e.g., vocabulary words, that can be changed, doing so is easy				
• Random generation is a part of the program's design				
• Packaging of the program is well designed, providing storage capacity for the program materials				
• Program package comes complete and ready-to-use				
• Program design allows for quick loading time and minimal disk-reading time				
• Program provides quick, obvious movement to and from the menu				
• The title screen sequence is not long or can be bypassed				
• Color is used				
• Animated graphics are used				
• Sound can be turned off or on from the program				
total (13 possible)				

Educational Value

Content Presentation

	always	some extent	never	N/A
• The concept, rather than the game, is the central learning outcome				
• The program is enjoyable to use				
• Content is arranged in a challenging way				
• Elements of the program are motivating to the child				
• This program could be of interest to users other than the program's target audience, e.g., parents, older siblings, etc				
• Content is applicable for early childhood age-range				
• The child can control own sequence throughout the program				
• Child can exit the activity at any point				
• Language, text, or print is appropriate for the early childhood age-range				
• The program includes data files (e.g., words, numbers) that can be changed				
• The program provides demonstrations				
• Practice is meaningful to the child (e.g., geographic location, home environment)				
• The graphics				
— are not overly "cute"				
— do not detract from the program's overall intentions				
• Graphics do not promote unnecessary stimulation				
• Music/sound does not promote unnecessary stimulation				
• Content is free from racial bias				
• Content is free from ethnic bias				
• Content is free from sexual bias				
total (19 possible)				

Content Strength

	always	some extent	never	N/A
• This program provides a good presentation of one or more conceptual areas				
• The program presents a clear focus on one or more conceptual areas				
• The concept, rather than the game, is the central learning outcome				
• The program provides practice with the concept in differing contexts				
• Elements of the program match direct experiences				
• The program is enjoyable to use				
total (6 possible)				

Instructional Design

Ease of Use

	always	some extent	never	N/A
• Can the child do the program the first time without help				
• Can the child do the program after the first few times without help				
• Does the child have control over:				
— time allowed for problems				
— rate of display				
— order of display				
— exiting at any time				
• The written instructions:				
— provide technical details for the program where needed				
— provide stategies for extending the concepts into noncomputer contexts				
— are well organized				
total (9 possible)				

Feedback

	always	some extent	never	N/A
• The child is aware of when he/she makes an incorrect response				
• The child is aware of when he/she makes a correct response				
• Feedback explains/shows why responses are not correct				
• Feedback responses are varied				
• Feedback is directly correlated to keystroke				
• Feedback is appropirate because it				
— is nonthreatening				
— reinforces content				
— is understood by the child				
• Feedback effectively makes use of sound and graphic capacities of the computer				
• A record of the child's work				
— is kept				
— can be printed				
— is informative				
total (12 possible)				

Embedded Reinforcements

	always	some extent	never	N/A
• Graphic reinforcements are in support of, or reinforce, the content or concepts presented				
• Sound reinforcements are in support of, or reinforce, the content or concepts presented				
total (4 possible)				

CMI Techniques

Techniques of Computer Managed Instruction

____ are not used in this convergent-style program (0 points)
____ are not appliable to this divergent-style program (NA)
____ are not applicable because the user or adult selects difficulty level (NA)
____ are used (check those that apply — 1 point each)
  ____ feedback is individualized to the child's response
  ____ program helps a child understand his or her progress, e.g., how many problems remaining
  ____ a record of the child's work is recorded
  ____ program is designed so that it can automatically adapt to an appropriate difficulty level

____ total (4 possible)

Comments of Reviewer to Software Producer

CALCULATION OF A COMPONENT SCORE

The following formula is used to compute the specific scores for each component of the program:

$$\frac{(X + Y/2)}{n - Z} \times 100 = S$$

Where
X = Total of checks in "always" column
Y = Total of checks in "some extent" column
Z = Total of checks in the "N/A" column
n = Number of items in a category (such as Feedback)
S = Score for a component of the program (as a percent)

For example:

Feedback

	always	some extent	never	N/A
• The child is aware of when he/she makes an incorrect response	✓			
• The child is aware of when he/she makes a correct response	✓			
• Feedback explains/shows why responses are not correct			✓	
• Feedback responses are varied	✓			
• Feedback is directly correlated to keystroke	✓			
• Feedback is appropriate because it				
— is nonthreatening	✓			
— reinforces content		✓		
— is understood by the user		✓		
• Feedback effectively makes use of sound and graphic capacities of the computer	✓			
• A record of the child's work				
— is kept			✓	
— can be printed				✓
— is informative				✓
Total (12 possible)	6	2	2	2

In this example

X = 6 (Total of checks under "always")
Y = 2 (Total of checks under "some extent")
Z = 2 (Total of checks under "N/A")
n = 12 (Number of items under the heading "Feedback")

So, when applying the formula above,

$$\frac{6 + 2/2}{12 - 2} \times 100 = 70$$

The component score (S) for Feedback is 70%.

APPENDIXES

APPENDIX 1: EARLY CHILDHOOD SOFTWARE PRODUCERS

Advanced Ideas, Inc.
2550 Ninth Street
Berkeley, CA 94710
415/526-9100
- Dinosaurs

Alphaphonics
P.O. Box 2024
San Mateo, CA 94401
415/588-8082
- Alphaget
- Astro's ABCs

American Guidance Service
Publishers Building
Circle Pines, MN 55014
800/328-2560
- SocPix

Aquarius People Materials
P.O. Box 128
Indian Rocks Beach, FL 33535
800/338-2644
813/595-7890
- Alpha Teach
- Counting Skills
- Critter Count
- Jr. Typer
- Language
- Ordering/Sequencing
- Spatial Relationships

Artworx
150 N. Main Street
Fairport, NY 14450
800/828-6573
- Hodge Podge
- Monkey Math

BeCi Software
78 Dartmouth Street
Boston, MA 02116
617/531-5116
- Fruit Tree/Gumball
- My Book
- Number BeCi
- Shape Games

C&C Software
5713 Kentford Circle
Wichita, KS 67220
316/683-6056
- Learning About Numbers
- Letters and First words
- Magic Crayon

CBS Software
CBS Inc., One Fawcett Place
Greenwich, CT 06836
203/622-2500
- Astro Grover
- Big Bird's Funhouse
- Big Bird's Special Delivery
- Dr. Seuss Fix . . . Puzzler
- Ducks Ahoy
- Ernie's Big Splash
- Ernie's Magic Shapes
- Grover's Animal Adventures
- Letter-Go-Round
- Pals Around Town

Compu-Tations
P.O. Box 502
Troy, MI 48099
313/689-5059
- Early Elementary I
- Early Elementary II

Compu-Teach
240 Bradley Street
New Haven, CT 06511
800/448-3224
- ABsCenes
- Arithmatic

D.C. Heath & Company
125 Spring Street
Lexington, MA 02173
800/225-1149
- A Great Leap
- Alphabots
- Grabbit Factory, The
- Learning Line, The
- Math Maze
- Maze-O
- Not Too Messy, Not Too Neat
- Picture Dictionary
- Sweet Shop, The

Data Command
P.O. Box 548
Kankakee, IL 60901
815/933-7735
- Alphabet Sounds
- One Banana More

Davidson and Associates, Inc.
3135 Kashiwa Street
Torrance, CA 90505
800/556-6141
In CA, 213/543-4070
- Math and Me

Designware, Inc.
185 Berry Street
San Francisco, CA 94107
800/572-2272
415/546-1866
- Creature Creator
- Notable Phantom, The
- Spellicopter

DIL International
2025 Lavoisier Street, #180
Sainte-Foy, Quebec
Canada, G1V 1N6
800/463-5581
- Extrateletactograph, The
- Mary Marvel and Willy Wiz at the Costume Ball
- Mary Marvel and Willy Wiz in the Garden

DLM
One DLM Park
Allen, TX 75002
800/527-4747
- Alphabet Circus
- Animal Photo Fun
- Comparison Kitchen
- Fish Scales
- Number Farm
- Shape & Color Rodeo
- Teddy Bear-rels of Fun

Dunamis, Inc.
3620 Highway 317
Suwanee, GA 30174
404/932-0485
- Distributors for the PowerPad ($99.95)

E.C.S.
P.O. Box 4758
Overland Park, KS 66204
913/831-3800
- Adventures of Jimmy Jumper
- Color Find
- Rabbit Scanner
- Touch and Match
- Touch and See

Educational Activities, Inc.
P.O. Box 392
Freeport, NY 11520
800/645-3739
- Adventures of Dobot, The
- Copycats: ABC for Micro and Me
- Early Childhood Learning Program
- First Encounters
- First Numbers: First Words
- It's Not Game
- Spaceship Lost

Edusoft
P.O Box 2560
Berkeley, CA 94702
800/EDUSOFT
415/548-2304
- Alphabet Song and Count

EduWare
185 Berry Street
San Fransisco, CA 94107
800/572-2272
415/546-1937
- Introduction to Counting
- Spelling and Reading Primer
- Webster's Numbers

EMC Publishing
300 York Avenue
St. Paul, MN 55101
800/328-1452
- Reading Readiness
- Space Chase

Firebird Licensees, Inc.
71 Franklin Turnpike
Waldwick, NJ 07463
201/444-5700
- Fantastic Animals
- Talking Teacher

First Byte, Inc.
2845 Temple Avenue
Long Beach, CA 90806
800/245-4525
In C\, 800/562-1112
- First Letters and Words
- First Shapes

First Star Software
18 E. 41st
New York, NY 10017
800/223-1545
- I Love My Alphabet

Floppy Enterprises
715 E. Fillmore Avenue
Eau Claire, WI 54701
- Floppy: Letters and Numerals
- Floppy: Match-Ups in Mazes
- Floppy: Printing Practice
- Floppy: Same and Different
- Floppy: What Is Missing

Grolier Electronic Publishing
Sherman Turnpike
Danbury, CT 06816
800/858-8858
- Exploring Your World: The Weather
- First Steps to Reading
- Play Together, Learn Together
- Rhyming to Read

Hartley Courseware, Inc.
Box 419
Dimondale, MI 48821
800/247-1380
In MI, 517/646-6458
- Bird's Eye View
- Colors and Shapes
- Conservation and Counting
- Dr. Peet's Talk/Writer
- Early Skills
- Letter Recognition
- My Words
- Observation and Classification
- Ollie and Seymour
- Patterns and Sequences
- Pictures, Letters, and Sounds
- Size and Logic

Houghton Mifflin Co.
Ed. Software Division
125 E. Lake Street, Suite 304
Bloomingdale, IL 60108
312/980-9710
- Kindermath II
- Reading Comp.: Level 1
- Reading Helpers
- Reading Starters
- Sound Ideas: Consonants
- Sound Ideas: Vowels
- Sound Ideas: Word Attack

HRM Software
175 Tompkins Avenue
Pleasantville, NY 10570
800/431-2050
- Alice in Wonderland
- Jack and the Beanstalk

IBM Educational Systems
P.O. Box 2150
4111 Northside Parkway N.W.
Atlanta, GA 30055
800/426-2468
- Bouncy Bee Learns Letters 1.0
- Bouncy Bee Learns Words 1.0
- Primary Editor 1.0
- Writing to Read 2.0

Intellectual Software
798 North Avenue Drive
Bridgeport, CT 06606
800/232-2224
- Developing Language Skills
- Diskovery Adding Machine
- Diskovery Take Away Zoo
- Talk About a Walk

Island Software
Box 300
Lake Grove, NY 11755
516/585-3755
- Letter Games
- Milk Bottles
- Puss in Boot
- Word Factory

Jostens Learning Systems, Inc.
600 W. University Drive
Arlington Heights, IL 60004
- Distributors of the Ufonic voice synthesizer

Laureate Learning Systems
110 East Spring Street
Winooski, VT 05404
802/655-4755
- Micro-LADS
- Talking Nouns I
- Talking Nouns II
- Talking Verbs

Lawrence Hall of Science
University of California
Berkeley, CA 94720
415/642-3167
- Estimation
- Music
- Numbers
- Words

Learning Company, The
545 Middlefield Road, Suite 170
Menlo Park, CA 94025
800/852-2255
- Bumble Games
- Gertrude's Secrets
- Juggle's Rainbow
- Math Rabbit
- Moptown Parade
- Reader Rabbit

Learning Technologies, Inc.
4255 LBJ Freeway, Suite 131
Dallas, TX 75244
800/238-4277
In TX, 214/385-2351
- Animal Hotel
- Bike Hike
- Flying Carpet, The
- How to Weigh an Elephant
- Let's Go Fishing
- Lion's Workshop
- Same or Different
- Shutterbug's Patterns
- Shutterbug's Pictures

MECC
3490 Lexington Avenue North
St. Paul, MN 55126-8097
612/481-3500
- Arithmetic Critters
- Counting
- Counting Critters 1.0
- EZ Logo
- First Letter Fun
- Fun From A to Z
- Money Works
- Paint With Words
- Path-Tactics
- Sound Tracks

Micro Power & Light Company
12820 Hillcrest Road, Suite 219
Dallas, TX 75230
214/239-6620
- Country Combo
- Time Master

Micro-Learningware
P.O. Box 307
Richmond, VA 23220
507/625-2205
- Teddy Bears Counting Fun

MicroEd, Inc.
P.O. Box 24156
Minneapolis, MN 55424
612/926-2292
- Beginning Counting
- Beginning Reading Skills
- Counting
- Early Math
- Learning the Alphabet

Midwest Software
Division of Zero-One Ltd.
Box 214
Farmington, MI 48024
313/477-0897
- Kinder Koncepts MATH

Milliken Publishing Co.
1100 Research Boulevard
St. Louis, MO 63132
314/991-4220
- Alien Counter & Faceflash
- Alphabetization Sequence
- Jar Game & Chaos, The
- Math Sequences

MindPlay
82 Montvale Avenue
Stoneham, MA 02180
800/221-7911
- Cat 'n Mouse
- Cotton Tales
- Math Magic
- Picture Perfect
- Race the Clock

Mindscape, Inc.
Education Division
3444 Dundee Road
Northbrook, IL 60062
800/221-9884 312/480-7667
In IL, 800/942-7315
- Best Electronic Word Book Ever
- Body Awareness
- Castle Clobber
- Color Me
- Counting Critters
- Fun With Directions
- Grownup and Small
- Knowing Numbers
- Letters and Words
- LOGO Power
- Many Ways to Say I Love You
- Shapes & Patterns
- Tink's Adventure
- Tink's Subtraction Fair
- Tinka's Mazes
- Tonk in the Land of Buddy-Bots
- Tuk Goes to Town

NTS Software
141 W. Rialto Avenue
Rialto, CA 92376
714/875-2968
- Starting Out: Set 1

Orange-Cherry Media
P.O. Box 390
Pound Ridge, NY 10576
800/672-6002
- Telling Time

P.E.A.L. Software
3200 Wilshire Boulevard
Suite 1207 South Tower
Los Angeles, CA 90010
213/451-0997
- Exploratory Play
- Keytalk
- Representational Play

Paperback Software
2612 Eighth Street
Berkeley, CA 94710
415/644-2116
- My ABC's

PDI Software
95 East Putnam Avenue
Greenwich, CT 06830
203/661-8799
- Alphabet Arcade, The
- Preschool IQ Builder I
- Preschool IQ Builder II

Personal Touch, Corp.
4320 Stevens Creek Boulevard
San Jose, CA 95129
408/246-8822
- Makers of the Touch Window ($199.00)

Polarware/Penguin Software
2600 Keslinger Road, P.O. Box 311
Geneva, IL 60134
312/232-1984
- Electronic Crayon Series

PTI/Koala Industries
269 Mount Hermon Road
Scotts Valley, CA 95066
800/223-3022
- Koala Pad Graphics Exhibitor

Random House Software
400 Hahn Road
Westminster, MD 21157
800/638-6460
Charlie Brown's 1-2-3's
Charlie Brown's ABC's
Peanuts Maze Marathon
Peanuts Picture Puzzlers

S.D.L.
Dale Moss
2715 Cabrillo #105
San Francisco, CA 94121
415/221-2479
Toybox

Scandura Training Systems
798 North Avenue Drive
Bridgeport, CT 06606
203/335-0960
Adventures in Space
Beginner Reader

Scarborough
55 S. Broadway
Tarrytown, NY 10591
914/332-4545
Build a Book About You

Scholastic Software
730 Broadway
New York, NY 10003
800/325-6149
Talking Textwriter

Sierra On-Line
Sierra On-Line Bldg.
Coarsegold, CA 93614
800/356-5252
209/683-6858
Learning With Fuzzywomp
Learning With Leeper

SouthWest EdPsych Services
P.O. Box 1870
Phoenix, AZ 85001
602/253-6528
The Reading Machine

Spinnaker Software Corp.
One Kendall Square
Cambridge, MA 02139
800/826-0706
Alpha Build
Alphabet Zoo
Delta Drawing
Early Learning Friends
Facemaker
Facemaker Golden Edition
Grandma's House
Kids on Keys
Kidwriter
Kindercomp
Kindercomp Golden Edition
Peter and the Wolf Music
Peter Rabbit Reading
Story Machine
Up & Add 'Em

Springboard
7808 Creekridge Circle
Minneapolis, MN 55435
800/654-6301
Early Games
Easy as ABC
Make a Match
Mask Parade
Music Maestro
Puzzle Master
Rainbow Painter
Stickers

Sterling Swift
7901 S. IH-35
Austin, TX 78744
512/282-6840
Music Readiness

Stone & Associates
7910 Ivanhoe Avenue, Suite 319
La Jolla, CA 92037
800/621-0852 #520
Kid's Stuff
Memory Master
My Letters, Numbers, and Words

Strawberry Hill Software
202-11961-88th Avenue
Delta, British Columbia
Canada V4C 3C9
604/594-5947
Surrounding Patterns

Street Electronics Corp.
1470 East Valley Road
P.O. Box 50220
Santa Barbara, CA 93150
805/565-1612
Makers of the Echo and Cricket voice synthesizers.

Sunburst Communications, Inc.
39 Washington Avenue, P.O Box 40
Pleasantville, NY 10570
800/431-1934
In Canada 800/247-6756
Counters
Getting Ready to Read and Add
Magic Slate
Memory Building Blocks
Muppet Learning Keys
Muppet Word Book
Muppets On Stage
Muppetville
Now You See It, Now You Don't
Odd One Out
Simon Says
Space Waste Race
Teddy and Iggy
Teddy's Playground
Tiger's Tales: A Reading Adventure
Touch & Write
What's in a Frame

Teach Yourself by Computer
349 W. Commercial Street
Suite 1000
E. Rochester, NY 14445
716/381-5450
Match-On-A-Mac

THESIS
P.O. Box 147-CC
Garden City, MI 48135
Math Facts Level I
Preschool Fun

Troll Associates
100 Corporate Drive
Mahwah, NJ 07430
800/526-5289
Bremen Town Musicians
I Can Count
Magic String, The
Rumpelstiltskin
Spelling Bee, The

Weekly Reader Software
10 Station Place
Norfolk, CT 06058
800/327-1473
203/542-5553
Stickybear ABC
Stickybear Math
Stickybear Numbers
Stickybear Opposites
Stickybear Printer
Stickybear Reading
Stickybear Shapes
Stickybear Town Builder
Stickybear Typing

Wescott Software
2316 Park Place
Evanston, IL 60201
312/328-1367
Fun With Letters and Words
Fun With Memory
Fun With Numbers

World Book, Inc.
Merchandise Mart Plaza
Chicago, IL 60654
312/245-3456
Come Play With Pockets
Happy Birthday, Pockets
Pockets and Her New Sneakers
Pockets Goes on a Picnic
Pockets Goes on Vacation
Pockets Goes to the Carnival
Pockets Leads the Parade

APPENDIX 2: SOFTWARE LISTING BY CONTENT AREA

LANGUAGE

Title	Concept	Overall Rating
Explore-a-Story: A Great Leap	■ Language experience	90
Not Too Messy, Not Too Neat	■ Language experience	89
Touch & Write	■ Printing practice	85
Keytalk	■ A beginning literacy activity	84
Cotton Tales	■ Word processing, language development	82
Easy as ABC	■ Letter recognition, alphabet order	82
First Letter Fun	■ Letter recognition	82
Muppet Word Book	■ Letters and words	82
Reading Comprehension: Level 1	■ Reading comprehension skills	82
Fun From A to Z	■ Alphabet skills practice	81
Magic Slate	■ Word processing	81
Muppets On Stage	■ Counting skills, letter recognition	81
Sound Ideas: Consonants	■ Consonant sounds	80
Sound Ideas: Vowels	■ Five vowel sounds (long, short) and y	80
Talking Nouns I	■ Language development	80
Talking Nouns II	■ Language development	80
Talking Textwriter	■ Exploration of written language	80
Talking Verbs	■ Language development	80
Tiger's Tales: A Reading Adventure	■ Reading vocabulary & comprehension	80
Dr. Peet's Talk/Writer	■ Language exploration and skills	79
Peter Rabbit Reading	■ Letters, letter sounds, and words	79
My Words	■ Language experience	78
Pictures, Letters, and Sounds	■ Letter recognition	78
Stickybear Reading	■ Word and sentence fun	77
Fun With Letters and Words	■ Letter recognition	76
Kid's Stuff	■ Counting skills, letter recognition	76
Talking Teacher	■ Letter identification	76
Micro-LADS	■ Syntactic comprehension	75
Electronic Crayon Series	■ Computer coloring	74
First Letters and Words	■ Letters & words, dinosaurs	74
Kidwriter	■ Creating computer storybooks	73
Paint With Words	■ Word recognition	73
Bouncy Bee Learns Letters 1.0	■ Letter recognition	72
Sound Ideas: Word Attack	■ Consonant blends, clusters and digraphs	72
Exploratory Play	■ Early language acquisition	71
Reader Rabbit	■ Basic reading skills/comprehension	71
Representational Play	■ Early language acquisition	71
Best Electronic Word Book Ever	■ Reading readiness skills	70
Adventures of Jimmy Jumper	■ Prepositional concepts	69
Alice in Wonderland	■ Remembering a sequence of events	69
Jack and the Beanstalk	■ Word recognition, event sequence	69
Race the Clock	■ Memory	69
Reading Helpers	■ Reading skills	69
Story Machine	■ Creative activity	69

Title	Concept	Overall Rating
Alphabet Circus	▪ Letter recognition, alphabet order	68
Build a Book About You	▪ Creating a book	68
Letters and First Words	▪ Letters, initial consonants	68
Letters and Words	▪ Letter recognition, alphabet order	68
Alphabetization Sequence	▪ Alphabetizing, letter discrimination	67
Spellicopter	▪ Spelling practice	66
Cat 'n Mouse	▪ Relational concepts	65
Reading Machine, The	▪ Various language skills	65
Charlie Brown's ABC's	▪ Letter recognition & association	64
Getting Ready to Read and Add	▪ Numerals, U/L- case letters	63
My ABC's	▪ Letter and numeral recognition	63
Reading Starters	▪ Reading skills	63
Astro's ABCs	▪ Letter recognition skills	62
Bouncy Bee Learns Words 1.0	▪ Word knowledge	62
It's No Game	▪ Personal safety skills	62
Kids on Keys	▪ Letter recognition	62
Words	▪ Letter disc., word experiences	61
I Love My Alphabet	▪ Letters, alphabetical order	59
Stickybear ABC	▪ Letter recognition	59
Beginning Reading Skills	▪ Beginning reading skills	57
Alpha Build	▪ Upper/lower-case, alphabetical order	56
Letter-Go-Round	▪ Letter matching	56
Memory Master	▪ Memory skills	56
Primary Editor 1.0	▪ Word processing	56
Talk About a Walk	▪ Classifying household objects	56
Maze-o	▪ Spelling words	55
Alphabots	▪ Letter recognition	54
Floppy: Match-ups in Mazes	▪ Letter recognition, numerical order	53
Picture Dictionary	▪ Word recall and memory	53
Alphabet Song and Count	▪ Alphabet order, counting skills	51
Alphabet Zoo	▪ Letter recognition	51
Alphaget	▪ Letter recognition practice	51
Exploring Your World: The Weather	▪ Body parts, weather words	51
Hodge Podge	▪ Letter recognition	51
Spelling and Reading Primer	▪ Spelling and reading practice	51
ABsCenes	▪ Letter recognition skills	50
Floppy: Printing Practice	▪ Letter and numeral formation	50
Learning the Alphabet	▪ Matching letters, alphabetical order	50
Space Waste Race	▪ Letter/numeral recognition	49
Copycats: ABC for Micro & Me!	▪ Matching, alphabet order	48
Letter Recognition	▪ Location of letters on keyboard	48
Floppy: Letters & Numerals	▪ Letter recognition	46
Magic String, The	▪ Reading skills	46
My Letters, Numbers, and Words	▪ Letter recognition	46
Bremen Town Musicians	▪ Homonyms, context clues, comprehension	45
Writing to Read 2.0	▪ Reading skills	45
Preschool Fun	▪ Counting, letters, & matching	44
First Steps to Reading	▪ Initial consonants	43
Rumpelstiltskin	▪ Reading comprehension	43
Alphabet Arcade, The	▪ Alphabetizing, dictionary skills	42
Developing Language Skills	▪ Vocabulary words	42
Stickybear Typing	▪ Typing skills	42
First Numbers: First Words	▪ 1-to-1 correspondence, visual memory	41
Jr. Typer	▪ Touch typing	41

Title	Concept	Overall Rating
Tink's Adventure	▪ Key location, alphabetical order	41
Tuk Goes to Town	▪ Develops spelling and vocabulary	41
Alpha Teach	▪ Alphabet, initial consonants	39
Beginner Reader	▪ Rhyming words	39
My Book	▪ Writing stories	38
Language	▪ Language recognition	37
Rhyming to Read	▪ Rhyming words	37
Letter Games	▪ Letter recognition	34
Spelling Bee, The	▪ Spelling skills	32
Alphabet Sounds	▪ Letter sounds, initial consonants	29
Early Elementary II	▪ Letter recognition, counting	28

NUMBER

Title	Concept	Overall Rating
Counting Critters 1.0	▪ Counting and early math concepts	81
Stickybear Math	▪ Counting, addition and subtraction	81
Arithmatic Critters	▪ Counting, addition, and subtraction	78
Learning About Numbers	▪ Counting, clocks, basic math facts	78
Math and Me	▪ Shapes, patterns, numbers, and addition	78
Math Rabbit	▪ Counting, matching sets, addition, subt.	78
Money Works	▪ Money skills	76
Up & Add 'Em	▪ Matching numbers	75
Number Farm	▪ Counting skills	74
Learning With Fuzzywomp	▪ Counting, matching, num. order	73
Conservation and Counting	▪ Counting skills	71
Fish Scales	▪ Measurement	71
Kindercomp Golden Edition	▪ Counting, letters, matching, and drawing	70
Counters	▪ Counting experiences	69
Diskovery Adding Machine	▪ Counting, addition skills	69
Math Sequences	▪ Number readiness	69
Path-Tactics	▪ Counting, basic math facts	69
Diskovery Take Away Zoo	▪ Counting, subtraction practice	68
Pockets Goes to the Carnival	▪ Counting, 1-1 correspondence	68
Charlie Brown's 1-2-3's	▪ Numeral recognition, counting	67
Knowing Numbers	▪ Fundamental math skill practice	67
Webster's Numbers	▪ Basic math concepts	67
Introduction to Counting	▪ Counting	66
Stickybear Numbers	▪ Counting	64

Counting Critters	▪ Counting, addition, and subtraction	62
Arithmatic	▪ Counting skills	60
Counting	▪ Primary arithmetic skills	60
Fun With Numbers	▪ Numeral recognition, adding and subtract	59
Tink's Subtraction Fair	▪ Subtraction skills, concepts of money	59
Numbers	▪ Numeral disc., counting	58
Kinder Koncepts MATH	▪ Number and math skills	57
Kindermath II	▪ Math fundamentals	57
Sweet Shop, The	▪ Number matching, basic facts	54
Counting	▪ Counting skills, basic facts	53
Math Magic	▪ Math facts (add, sub., mult., div.)	53
Grabbit Factory, The	▪ Numerals, basic math facts	52
Math Maze	▪ Basic math facts	52
Alien Counter & Faceflash	▪ Numeral recognition, counting	51
Bumble Games	▪ Plotting (x,y) points on a grid	49
Monkey Math	▪ Basic math facts, numerical order	49
Starting Out: Set 1	▪ Counting, basic facts	45
Beginning Counting	▪ Counting from 1 to 9	43
Early Math	▪ Counting, numerical order, basic skills	43
Tinka's Mazes	▪ Strengthen mathematical skills	43
How to Weigh an Elephant	▪ Estimation of weight	42
Astro-Grover	▪ Counting, adding, and subtracting	41
Counting Skills	▪ Counting skills	40
I Can Count	▪ Counting up to 10	40
Milk Bottles	▪ Comparing amounts	39
Math Facts Level 1	▪ Counting, numeral recognition	38
Let's Go Fishing	▪ Counting and addition skills	36
Critter Count	▪ Basic math facts	34
Teddy Bears Counting Fun	▪ Counting skills	32
Number BeCi	▪ Grouping and counting	29
Fruit Tree/Gumball	▪ Counting, adding, and subtracting	28

SPACE

Title	Concept	Overall Rating
Puzzle Master	■ Problem solving (puzzles)	84
Stickybear Town Builder	■ Map skills	80
Delta Drawing	■ Drawing, programming concepts	78
Surrounding Patterns	■ Visual imagery, symmetry	77
Bird's Eye View	■ Perspective and positional relationships	73
Pals Around Town	■ Community exploration	73
Stickybear Opposites	■ Opposites, e.g., "near/far"	73
Adventures of Dobot, The	■ Problem solving, critical thinking	70
Dr. Seuss Fix-Up . . . Puzzler	■ Problem solving	70
Fantastic Animals	■ Part/whole relationships	70
Stickybear Shapes	■ Shape identification	70
Grandma's House	■ Exploring and arranging	68
Body Awareness	■ Location of body parts	64
Pockets Goes on Vacation	■ Positional relationships	63
Floppy: What Is Missing	■ Parts and wholes, body parts	62
Fun With Directions	■ Perceptual and cognitive skills	62
Juggle's Rainbow	■ Spatial relationships	62
Facemaker Golden Edition	■ Creativity, memory, and concentration	61
Ernie's Big Splash	■ Planning, predicting, problem solving	59
Peanuts Picture Puzzlers	■ Problem solving (puzzles)	59
Tonk in the Land of Buddy-Bots	■ Problem solving	56
Adventures in Space	■ Spatial relationships	46
Spaceship Lost	■ Spatial relationships	45
Flying Carpet, The	■ Shape recognition	44
Puss in Boot	■ Spatial concepts	34
Space Chase	■ Spatial relationships	31
Spatial Relationships	■ Spatial relationships	25

CLASSIFICATION

Title	Concept	Overall Rating
Muppetville	▪ Classifying, memory skills	87
Gertrude's Secrets	▪ Classifying and seriating	84
Teddy's Playground	▪ Practice with color and shape attributes	83
Teddy and Iggy	▪ Sequential memory practice	81
Observation and Classification	▪ Classification skills	80
First Shapes	▪ Five basic shapes	78
Ollie and Seymour	▪ Pedestrian safety, readiness skills	77
Peter and the Wolf Music	▪ Music skills: pitch and melody	77
Colors and Shapes	▪ Color ID, visual discrimination	76
Grover's Animal Adventures	▪ Classifying animals	76
Make a Match	▪ Matching	75
Pockets Leads the Parade	▪ Pattern recognition	75
Odd One Out	▪ Matching/discrimination	74
Match-On-A-Mac	▪ Matching, counting, upper/lower-case	73
Shape & Color Rodeo	▪ Recognizing shapes and colors	73
Comparison Kitchen	▪ Compare and categorize pictures	72
Patterns and Sequences	▪ Matching/discrimination	72
Happy Birthday, Pockets	▪ Visual discrimination	71
Color Find	▪ Matching colors	69
Come Play With Pockets	▪ Visual memory, tracking skills	66
Shapes & Patterns	▪ Visual disc., cognitive skills	66
Dinosaurs	▪ Reading, math, and memory skills	65
Touch and Match	▪ Classification	65
Learning Line, The	▪ Matching	62
Mary Marvel . . . Costume Ball	▪ Variety of basic skills	62
Mary Marvel . . . the Garden	▪ Functional intelligence, social skills	62
Pockets and Her New Sneakers	▪ Sorting and classification skills	62
Early Skills	▪ Shape and word discrimination	61
Pockets Goes on a Picnic	▪ Classification, part/whole rel.	61
SocPix	▪ Classification (class membership)	61
Castle Clobber	▪ Logical thinking skills	56
Moptown Parade	▪ Classification and seriation	55
Same or Different	▪ Visual discrimination, matching	55
Lion's Workshop	▪ Visual discrimination	49
Ernie's Magic Shapes	▪ Visual discrimination practice	45
Preschool IQ Builder II	▪ Matching, shapes, numbers, letters	43
Jar Game & Chaos, The	▪ Probability, discrimination	42
Floppy: Same and Different	▪ Visual discrimination	41
Preschool IQ Builder I	▪ Concepts of same and different	38
Shutterbug's Patterns	▪ Sequencing, pattern recognition	36
One Banana More	▪ Reading readiness, counting	34
Reading Readiness	▪ Matching shapes, letters, numerals	32
Big Bird's Special Delivery	▪ Object recognition	31
Early Elementary I	▪ Counting and matching	27
Country Combo	▪ Creative experience	26
Word Factory	▪ Word discrimination	22

SERIATION

Title	Concept	Overall Rating
Size and Logic	■ Size discrimination, patterns	77
Grownup and Small	■ Adult and baby names	68
Notable Phantom, The	■ Musical notation, pitch recognition	66
Shape Games	■ Pattern recognition	44
Ordering/Sequencing	■ Seriation concepts	38

TIME

Title	Concept	Overall Rating
Early Learning Friends	■ Shapes, colors, sizes, and timing	71
Rabbit Scanner, The	■ Eye tracking, matching	67
Estimation	■ Est. of length, area, & time units	64
Creature Creator	■ Pattern matching, programming	62
Ducks Ahoy	■ Logical reasoning skills	54
Peanuts Maze Marathon	■ Problem solving (mazes)	46
Telling Time	■ Clock practice	34
Time Master	■ Clock practice	25

CREATIVE PROJECTS

Title	Concept	Overall Rating
Color Me	▪ Drawing, creating	89
Mask Parade	▪ Creative design	84
Stickers	▪ Creative activity	84
Rainbow Painter	▪ Drawing	80
Picture Perfect	▪ Draw, color, and write	79
Koala Pad Graphics Exhibitor	▪ Drawing	76
Magic Crayon	▪ Drawing with arrow keys	75
EZ Logo	▪ Problem solving, directionality	74
Sound Tracks	▪ Making pictures	74
Extrateletactograph, The	▪ Drawing and writing stories	73
Music Maestro	▪ Practice with musical notation	73
Toybox	▪ Exploration of the computer	73
Learning With Leeper	▪ Counting, matching, drawing	69
Many Ways to Say I Love You	▪ Creative design	69
Kindercomp	▪ Matching, U/L-case practice, drawing	68
Early Games	▪ Counting, letters, and drawing	60
LOGO Power	▪ Teach 12 basic LOGO commands	59
Music	▪ Seriation of pitch	59
Teddy Bear-rels of Fun	▪ Creating pictures, graphics, and stories	56
Facemaker	▪ Pattern matching, creative activity	54
Early Childhood . . . Program	▪ Conceptual skill development	53
Stickybear Printer	▪ "Printing fun for everyone"	43
Music Readiness	▪ Music concepts: pitch and rhythm	41

OTHER TOPICS

Title	Concept	Overall Rating
Memory Building Blocks	▪ Visual and auditory memory skills	89
Simon Says	▪ Chaining memory exercise	85
What's in a Frame?	▪ Memory practice by context clues	83
Now You See It, Now You Don't	▪ Memory skills	81
Fun With Memory	▪ Memory	77
Animal Photo Fun	▪ Animals and their habitats	70
Shutterbug's Pictures	▪ Memory skills, reading readiness	61
Touch and See	▪ Memory skills	61
Big Bird's Funhouse	▪ Concentration and memory	49
Animal Hotel	▪ Memory skills	45
Play Together Learn Together	▪ Introduction to computer use	44
Bike Hike	▪ Memory, recall of objects	41
First Encounters	▪ Computer literacy skills	32

APPENDIX 3: TALLY OF SOFTWARE TITLES BY CONCEPTUAL AREA

— LANGUAGE —

#	EXPERIENCE	PROGRAMS (X = 1 program)
LA/1	Describing objects, events, and relations	XXXXXXXXXX (10)
LA/2	Describing feelings, one's own and others'	XXXX (4)
LA/3	Having one's own spoken language written and read aloud	XXXXXXXXXXXX (13)
LA/4	Recognizing letters	XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX (76)
LA/5	Recognizing words — matching written words	XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX X (61)
LA/6	Matching sounds and symbols	XXXXXXXXXXXXXXXXXX (19)
LA/7	Matching rhyming words	XXXXX (5)
LA/8	Using language to specify actions: sit, run, fast, slow, into, toward, etc.	XXXXXXXXXXXXXXXXXX (18)
LA/9	Writing stories	XXXXXXXXXXXXXX (14)
LA/10	Following a simple (2- or 3-step) sequence of oral or written directions	XXX (3)

— SERIATION —

#	EXPERIENCE	PROGRAMS (X = 1 program)
SE/1	Making comparisons — shape, shades of color, pitch, and/or speed	XXXXXXXXXX (11)
SE/2	Arranging several things in order and describing their relations by size, color, etc.	XXXXXX (6)
SE/3	Fitting one ordered set of objects to another through trial and error	
SE/4	Inserting objects into an ordered sequence	XXXXXXXXXX (12)

— NUMBER —

#	EXPERIENCE	PROGRAMS (X = 1 program)
NB/1	Comparing amounts: more, less, same	XXXXXXXXXXXXXXXXX (18)
NB/2	Arranging two sets of symbols in one-to-one correspondence	XXXXXXXX (8)
NB/3	Counting objects; counting by 2s	XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX (55)
NB/4	Recognizing numerals	XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX XXX (43)
NB/5	Estimating the number of objects	XXXXXXXX (8)
NB/6	Measuring (length) using units	XXXXX (5)
NB/7	Combining groups of objects; taking objects away	XXXXXXXXXXX (12)
NB/8	Recognizing and naming the numerals 1, 2, 3, etc.	XXXXXXXXXXXXXXX (16)

— CLASSIFICATION —

#	EXPERIENCE	PROGRAMS (X = 1 program)
CL/1	Identifying attributes of things: color, shape, size, function	XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXX (34)
CL/2	Identifying how things are the same or different; sorting and matching	XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXX (70)
CL/3	Describing objects in different ways; sorting and re-sorting	XX (2)
CL/4	Identifying attributes an object does not possess; finding the object that does not belong to a set	XXXX (4)
CL/5	Holding more than one attribute in mind at a time	XXX (3)
CL/6	Distinguishing between "all" and "some"	

— SPATIAL RELATIONS —

#	EXPERIENCE	PROGRAMS (X = 1 program)
SP/1	Fitting things together and taking them apart	XXXXXXXXXXX (12)
SP/2	Rearranging and reshaping objects	XXXXXXX (6)
SP/3	Identifying things from different points of view	XXXX (4)
SP/4	Experiencing and describing the relative positions, directions, and distances of things — inside, outside, above, below, before, behind, on, under, toward, away	XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX (37)
SP/5	Identifying and naming body parts: head, legs, arms, etc.	XXXXXXXXX (10)
SP/6	Locating things in the classroom or school on simple maps	XXXXX (5)
SP/7	Interpreting representations of spatial relations in drawings and pictures	XXXXXXXXXXXXXXXX (17)
SP/8	Distinguishing and describing shapes — circle, square, triangle, doughnut (open and closed shapes)	XXXXXXXXXXX (12)
SP/9	Identifying and reversing spatial order	XX (2)
SP/10	Identifying shapes produced by cuts and folds	

— CREATIVE PROJECTS —

#	AREA	PROGRAMS (X = 1)
CP/1	Drawing pictures	XXXXXXXXXXXXX (14)
CP/2	Creating sounds or music	XXXXXXXXX (9)
CP/3	Programming	XXXXXXXX (8)
CP/4	Designing, changing, and printing a plan or product	XXXXXXXXXXXXXXXXXXX XXXXXXXX (29)

— TIME —

#	EXPERIENCE	PROGRAMS (X = 1 program)
TI/1	Stopping and starting an action on signal	XXXXXX (6)
TI/2	Observing and describing changes	
TI/3	Experiencing and describing different rates of speed	XXXXXX (6)
TI/4	Experiencing and describing time intervals — long, short, comparative terms	XXX (3)
TI/5	Anticipating future events and making appropriate preparations	XXXX (3)
TI/6	Identifying the order of a sequence of events; reversing the order of events — before, after, at the same time	XXXXXX (6)
TI/7	Comparing the duration of events occurring at the same time — longer, shorter, etc.	
TI/8	Using a timer to measure the duration of events	
TI/9	Reading time from clocks and watches	XXX (3)

— OTHER TOPICS —

#	AREA	PROGRAMS (X = 1)
OT/1	Practicing memory skills	XXXXXXXXXXXXXXXXXX XXXXXXXXXXXX (34)
OT/2	Recognizing and naming the parts of the computer	X (1)
OT/3	Typing or keyboarding practice	XXX (3)
OT/4	Making signs, word processing, or keeping records. (Of potential use to preschool and kindergarten teachers.)	XXXXXXXX (8)

149

APPENDIX 4: SOFTWARE LISTING BY COMPUTER BRAND

APPLE (250 titles)

Title	Computer (* = version reviewed)	Overall Rating
ABsCenes	Apple*, IBM, Mac	50
Adventures in Space	Apple	46
Adventures of Dobot, The	Apple*, IBM, C64	70
Adventures of Jimmy Jumper	Apple	69
Alice in Wonderland	Apple	69
Alien Counter & Faceflash	Apple*, Atari	51
Alpha Build	Apple*, IBM, C64 (cartridge)	56
Alpha Teach	Apple	39
Alphabet Arcade, The	Apple*, C64, Atari	42
Alphabet Circus	Apple*, IBM, C64	68
Alphabet Song and Count	Apple	51
Alphabet Sounds	Apple	29
Alphabet Zoo	Apple*, IBM, C64	51
Alphabetization Sequence	Apple	67
Alphabots	Apple	54
Alphaget	Apple	51
Animal Hotel	Apple	45
Animal Photo Fun	Apple	70
Arithmatic	Apple*, IBM, Mac	60
Arithmatic Critters	Apple (64K)	78
Astro's ABCs	Apple	62
Astro-Grover	Apple, C64*	41
Beginner Reader	Apple	39
Best Electronic Word Book Ever	Apple*, C64	70
Bike Hike	Apple*, C64	41
Bird's Eye View	Apple*, IBM	73
Body Awareness	Apple	64
Bremen Town Musicians	Apple	45
Build a Book About You	Apple	68
Bumble Games	Apple	49
Castle Clobber	Apple, IBM*, C64, Atari	56
Cat 'n Mouse	Apple*, IBM	65
Charlie Brown's 1-2-3's	Apple	67
Charlie Brown's ABC's	Apple*, C64, IBM	64
Color Find	Apple	69
Color Me	Apple*, IBM, C64	89
Colors and Shapes	Apple	76
Comparison Kitchen	Apple*, IBM	72
Conservation and Counting	Apple	71
Copycats: ABC for Micro & Me!	Apple*, C64	48
Cotton Tales	Apple	82
Counters	Apple	69

Title	Computer (* = version reviewed)	Overall Rating
Counting	Apple*, C64	53
Counting Critters	Apple	62
Counting Critters 1.0	Apple (64K)	81
Counting Skills	Apple*, TRS 80	40
Country Combo	Apple	26
Creature Creator	Apple*, IBM	62
Critter Count	Apple	34
Delta Drawing	Apple, IBM*, C64*	78
Developing Language Skills	Apple	42
Dinosaurs	Apple*, IBM, C64	65
Diskovery Adding Machine	Apple	69
Diskovery Take Away Zoo	Apple	68
Dr. Peet's Talk/Writer	Apple	79
Dr. Seuss Fix-Up . . . Puzzler	Apple, C64*	70
Early Childhood . . . Program	Apple*, C64	53
Early Elementary I	Apple*, Atari, IBM	27
Early Elementary II	Apple	28
Early Games	Apple*, IBM, C64, Atari	60
Early Skills	Apple	61
Easy as ABC	Apple*, Mac, IBM, C64	82
Electronic Crayon Series	Apple* (128K), IBM, C64	74
Estimation	Apple	64
Exploring Your World: The Weather	Apple*, C64	51
Exploratory Play	Apple (64K)	71
Explore-a-Story: A Great Leap	Apple (128K)	90
Extrateletactograph, The	Apple II + or IIe (not IIc)	73
EZ Logo	Apple (64K)	74
Facemaker	Apple, IBM*, C64, Atari	54
Facemaker Golden Edition	Apple*, Amiga	61
Fantastic Animals	Apple*, IBM, C64	70
First Encounters	Apple	32
First Letter Fun	Apple (64K)	82
First Letters and Words	Apple IIGS*, Mac, Amiga, Atari ST	74
First Numbers: First Words	Apple*, C64	41
First Shapes	Apple IIGS*, Mac, Amiga, Atari ST	78
First Steps to Reading	Apple*, C64	43
Fish Scales	Apple	71
Floppy: Letters & Numerals	Apple	46
Floppy: Match-ups in Mazes	Apple	53
Floppy: Printing Practice	Apple	50
Floppy: Same and Different	Apple	41
Floppy: What Is Missing	Apple	62
Flying Carpet, The	Apple*, C64	44
Fun From A to Z	Apple (64K)	81
Fun With Directions	Apple	62
Gertrude's Secrets	Apple*, IBM*, C64	84
Getting Ready to Read and Add	Apple, IBM*, Atari, C64*	63
Grabbit Factory, The	Apple	52
Grandma's House	Apple*, C64, Atari	68
Grownup and Small	Apple	68
Hodge Podge	Apple*, C64, IBM, Atari	51
How to Weigh an Elephant	Apple*, C64	42
I Can Count	Apple	40
I Love My Alphabet	Apple*, C64, Atari	59

Title	Computer (* = version reviewed)	Overall Rating
Introduction to Counting	Apple*, IBM, Atari	66
It's No Game	Apple	62
Jack and the Beanstalk	Apple	69
Jar Game & Chaos, The	Apple*, Atari	42
Jr. Typer	Apple*, TRS 80	41
Juggle's Rainbow	Apple, IBM*, C64	62
Keytalk	Apple (64K)	84
Kid's Stuff	IBM*, Apple, Atari ST	76
Kids on Keys	Apple*, IBM, C64, Atari	62
Kidwriter	Apple*, C64*, IBM	73
Kinder Koncepts MATH	Apple*, C64, PET	57
Kindercomp	Apple, IBM*, C64, Atari	68
Kindercomp Golden Edition	Apple*, IBM	70
Kindermath II	Apple (64K)	57
Knowing Numbers	Apple	67
Koala Pad Graphics Exhibitor	Apple IIe*, II+, IBM	76
Language	Apple*, TRS 80	37
Learning About Numbers	Apple	78
Learning Line, The	Apple	62
Learning With Fuzzywomp	Apple*, C64	73
Learning With Leeper	Apple*, C64, Atari	69
Let's Go Fishing	Apple*, C64	36
Letter Games	Apple	34
Letter Recognition	Apple	48
Letters and First Words	Apple	68
Letters and Words	Apple	68
Lion's Workshop	Apple*, C64	49
LOGO Power	Apple	59
Magic Crayon	Apple	75
Magic Slate	Apple	81
Magic String, The	Apple	46
Make a Match	Apple*, IBM*, Atari	75
Many Ways to Say I Love You	Apple, C64*	69
Mary Marvel . . . Costume Ball	Apple	62
Mary Marvel . . . the Garden	Apple	62
Mask Parade	Apple*, IBM, C64	84
Math and Me	Apple (128K)	78
Math Facts Level 1	Apple	38
Math Magic	Apple*, IBM	53
Math Maze	Apple*, IBM, Atari, C64	52
Math Rabbit	Apple*, IBM	78
Math Sequences	Apple	69
Maze-o	Apple	55
Memory Building Blocks	Apple	89
Micro-LADS	Apple	75
Milk Bottles	Apple	39
Money Works	Apple (128K)	76
Monkey Math	Apple*, C64, Atari	49
Moptown Parade	Apple*, IBM*, C64	55
Muppet Word Book	Apple	82
Muppets On Stage	Apple*, IBM, C64	81

Title	Computer (* = version reviewed)	Overall Rating
Muppetville	Apple	87
Music	Apple	59
Music Maestro	Apple*, IBM, C64, Atari	73
Music Readiness	Apple	41
My Letters, Numbers, and Words	IBM*, Apple, Atari ST	46
My Words	Apple (64K)	78
Not Too Messy, Not Too Neat	Apple	89
Notable Phantom, The	Apple*, IBM, C64	66
Now You See It, Now You Don't	Apple	81
Number Farm	Apple*, C64, IBM	74
Numbers	Apple	58
Observation and Classif.	Apple	80
Odd One Out	Apple*, C64	74
Ollie and Seymour	Apple	77
One Banana More	Apple	34
Ordering/Sequencing	Apple*, TRS80	38
Paint With Words	Apple (64K)	73
Path-Tactics	Apple*, IBM, C64	69
Patterns and Sequences	Apple	72
Peanuts Maze Marathon	Apple*, C64, IBM	46
Peanuts Picture Puzzlers	Apple*, C64, IBM	59
Peter and the Wolf Music	Apple*, C64	77
Peter Rabbit Reading	Apple*, C64	79
Picture Dictionary	Apple	53
Picture Perfect	Apple*, IBM,	79
Pictures, Letters, and Sounds	Apple	78
Play Together Learn Together	Apple*, IBM, C64	44
Preschool Fun	Apple	44
Preschool IQ Builder I	Apple*, C64, Atari, PET*	38
Preschool IQ Builder II	Apple*, C64, PET, TI	43
Puss in Boot	Apple	34
Puzzle Master	Apple*, IBM, C64	84
Rabbit Scanner, The	Apple	67
Race the Clock	Apple*, IBM	69
Rainbow Painter	Apple*, C64	80
Reader Rabbit	Apple*, IBM, C64, Apple IIGS	71
Reading Comprehension: Level 1	Apple (64K)	82
Reading Helpers	Apple (64K)	69
Reading Machine, The	Apple	65
Reading Readiness	Apple	32
Reading Starters	Apple (64K)	63
Representational Play	Apple (64K)	71
Rhyming to Read	Apple* C64	37
Rumpelstiltskin	Apple	43
Same or Different	Apple*, C64	55
Shape & Color Rodeo	Apple*, IBM, C64	73
Shapes & Patterns	Apple	66
Shutterbug's Patterns	Apple*, C64	36
Shutterbug's Pictures	Apple*, C64	61

Title	Computer (* = version reviewed)	Overall Rating
Simon Says	Apple*, C64	85
Size and Logic	Apple	77
SocPix	Apple	61
Sound Ideas: Consonants	Apple (64K)	80
Sound Ideas: Vowels	Apple (64K)	80
Sound Ideas: Word Attack	Apple (64K)	72
Sound Tracks	Apple (64K)	74
Space Chase	Apple	31
Space Waste Race	Apple*, Atari, TRS 80	49
Spaceship Lost	Apple	45
Spatial Relationships	Apple	25
Spellicopter	Apple*, IBM, C64	66
Spelling and Reading Primer	Apple*, IBM, C64	51
Spelling Bee, The	Apple	32
Starting Out: Set 1	Apple*, TRS80	45
Stickers	Apple, IBM*, C64	84
Stickybear ABC	Apple*, Atari, C64	59
Stickybear Math	Apple*, IBM, C64	81
Stickybear Numbers	Apple*, IBM, Atari, C64	64
Stickybear Opposites	Apple*, Atari, C64	73
Stickybear Printer	Apple	43
Stickybear Reading	Apple*, IBM, C64	77
Stickybear Shapes	Apple*, Atari, C64	70
Stickybear Town Builder	Apple*, C64	80
Stickybear Typing	Apple*, IBM, C64	42
Story Machine	Apple*, IBM, Atari, C64, TI	69
Surrounding Patterns	Apple*, C64	77
Sweet Shop, The	Apple	54
Talk About a Walk	Apple	56
Talking Nouns I	Apple (128K)	80
Talking Nouns II	Apple (128K)	80
Talking Textwriter	Apple (128K), Apple IIGS, IBM	80
Talking Verbs	Apple (128K)	80
Teddy and Iggy	Apple*, C64	81
Teddy Bear-rels of Fun	Apple*, C64	56
Teddy Bears Counting Fun	Apple	32
Teddy's Playground	Apple	83
Telling Time	Apple*, C64, TRS 80, IBM, Atari, Pet	34
Tiger's Tales: A Reading Adventure	Apple*, C64	80
Time Master	Apple	25
Tink's Adventure	Apple*, C64, IBM, Atari	41
Tink's Subtraction Fair	Apple*, C64, IBM, Atari	59
Tinka's Mazes	Apple*, IBM, C64, Atari	43
Tonk in the Land of Buddy-Bots	Apple*, C64, IBM, Atari	56
Touch & Write	Apple	85
Touch and Match	Apple	65
Touch and See	Apple	61
Toybox	C64*, Apple (128), IBM	73
Tuk Goes to Town	Apple*, C64, IBM, Atari	41
Up & Add 'Em	Apple*, IBM, C64	75
Webster's Numbers	Apple*, C64	67
What's in a Frame?	Apple	83
Word Factory	Apple	22
Words	Apple	61

C64 (108 titles)

Title	Computer (* = version reviewed)	Overall Rating
Adventures of Dobot, The	Apple*, IBM, C64	70
Alpha Build	Apple*, IBM, C64 (cartridge)	56
Alphabet Arcade, The	Apple*, C64, Atari	42
Alphabet Circus	Apple*, IBM, C64	68
Alphabet Zoo	Apple*, IBM, C64	51
Astro-Grover	Apple, C64*	41
Best Electronic Word Book Ever	Apple*, C64	70
Big Bird's Funhouse	C64	49
Big Bird's Special Delivery	C64* (cartridge), IBM	31
Bike Hike	Apple*, C64	41
Castle Clobber	Apple, IBM*, C64, Atari	56
Charlie Brown's ABC's	Apple*, C64, IBM	64
Color Me	Apple*, IBM, C64	89
Copycats: ABC for Micro & Me!	Apple*, C64	48
Counting	C64	60
Counting	Apple*, C64	53
Delta Drawing	Apple, IBM*, C64*	78
Dinosaurs	Apple*, IBM, C64	65
Dr. Seuss Fix-Up . . . Puzzler	Apple, C64*	70
Ducks Ahoy	C64 (cartridge)	54
Early Childhood . . . Program	Apple*, C64	53
Early Games	Apple*, IBM, C64, Atari	60
Early Learning Friends	C64	71
Easy as ABC	Apple*, Mac, IBM, C64	82
Electronic Crayon Series	Apple* (128K), IBM, C64	74
Ernie's Big Splash	C64	59
Ernie's Magic Shapes	C64*, Atari, IBM	45
Expl. Your World: The Weather	Apple*, C64	51
Facemaker	Apple, IBM*, C64, Atari	54
Fantastic Animals	Apple*, IBM, C64	70
First Numbers: First Words	Apple*, C64	41
First Steps to Reading	Apple*, C64	43
Flying Carpet, The	Apple*, C64	44
Fruit Tree/Gumball	C64*, VIC 20	28
Gertrude's Secrets	Apple*, IBM*, C64	84
Getting Ready to Read and Add	Apple, IBM*, Atari, C64*	63
Grandma's House	Apple*, C64, Atari	68
Grover's Animal Adventures	C64	76
Hodge Podge	Apple*, C64, IBM, Atari	51
How to Weigh an Elephant	Apple*, C64	42
I Love My Alphabet	Apple*, C64, Atari	59
Juggle's Rainbow	Apple, IBM*, C64	62
Kids on Keys	Apple*, IBM, C64, Atari	62
Kidwriter	Apple*, C64*, IBM	73
Kinder Koncepts MATH	Apple*, C64, PET	57
Kindercomp	Apple, IBM*, C64, Atari	68
Learning With Fuzzywomp	Apple*, C64	73
Learning With Leeper	Apple*, C64, Atari	69
Let's Go Fishing	Apple*, C64	36

Title	Computer (* = version reviewed)	Overall Rating
Letter-Go-Round	C64* (cartridge), Atari	56
Lion's Workshop	Apple*, C64	49
Many Ways to Say I Love You	Apple, C64*	69
Mask Parade	Apple*, IBM, C64	84
Math Maze	Apple*, IBM, Atari, C64	52
Monkey Math	Apple*, C64, Atari	49
Moptown Parade	Apple*, IBM*, C64	55
Muppets On Stage	Apple*, IBM, C64	81
Music Maestro	Apple*, IBM, C64, Atari	73
My Book	C64*, Atari	38
Notable Phantom, The	Apple*, IBM, C64	66
Number BeCi	C64*, VIC 20	29
Number Farm	Apple*, C64, IBM	74
Odd One Out	Apple*, C64	74
Pals Around Town	C64	73
Path-Tactics	Apple*, IBM, C64	69
Peanuts Maze Marathon	Apple*, C64, IBM	46
Peanuts Picture Puzzlers	Apple*, C64, IBM	59
Peter and the Wolf Music	Apple*, C64	77
Peter Rabbit Reading	Apple*, C64	79
Play Together Learn Together	Apple*, IBM, C64	44
Preschool IQ Builder I	Apple*, C64, Atari, PET*	38
Preschool IQ Builder II	Apple*, C64, PET, TI	43
Puzzle Master	Apple*, IBM, C64	84
Rainbow Painter	Apple*, C64	80
Reader Rabbit	Apple*, IBM, C64, Apple IIGS	71
Rhyming to Read	Apple* C64	37
Same or Different	Apple*, C64	55
Shape & Color Rodeo	Apple*, IBM, C64	73
Shape Games	C64*, VIC 20	44
Shutterbug's Patterns	Apple*, C64	36
Shutterbug's Pictures	Apple*, C64	61
Simon Says	Apple*, C64	85
Spellicopter	Apple*, IBM, C64	66
Spelling and Reading Primer	Apple*, IBM, C64	51
Stickers	Apple, IBM*, C64	84
Stickybear ABC	Apple*, Atari, C64	59
Stickybear Math	Apple*, IBM, C64	81
Stickybear Numbers	Apple*, IBM, Atari, C64	64
Stickybear Opposites	Apple*, Atari, C64	73
Stickybear Reading	Apple*, IBM, C64	77
Stickybear Shapes	Apple*, Atari, C64	70
Stickybear Town Builder	Apple*, C64	80
Stickybear Typing	Apple*, IBM, C64	42
Story Machine	Apple*, IBM, Atari, C64, TI	69
Surrounding Patterns	Apple*, C64	77
Talking Teacher	C64	76
Teddy and Iggy	Apple*, C64	81

Title	Computer (* = version reviewed)	Overall Rating
Teddy Bear-reis of Fun	Apple*, C64	56
Telling Time	Apple*, C64, TRS 80, IBM, Atari, Pet	34
Tiger's Tales: A Reading Adventure	Apple*, C64	80
Tink's Adventure	Apple*, C64, IBM, Atari	41
Tink's Subtraction Fair	Apple*, C64, IBM, Atari	59
Tinka's Mazes	Apple*, IBM, C64, Atari	43
Tonk in the Land of Buddy-Bots	Apple*, C64, IBM, Atari	56
Toybox	C64*, Apple (128), IBM	73
Tuk Goes to Town	Apple*, C64, IBM, Atari	41
Up & Add 'Em	Apple*, IBM, C64	75
Webster's Numbers	Apple*, C64	67

IBM (87 titles)

Title	Computer (* = version reviewed)	Overall Rating
ABsCenes	Apple*, IBM, Mac	50
Adventures of Dobot, The	Apple*, IBM, C64	70
Alpha Build	Apple*, IBM, C64 (cartridge)	56
Alphabet Circus	Apple*, IBM, C64	68
Alphabet Zoo	Apple*, IBM, C64 ($20.95)	51
Arithmatic	Apple*, IBM, Mac	60
Big Bird's Special Delivery	C64* (cartridge), IBM	31
Bird's Eye View	Apple*, IBM	73
Bouncy Bee Learns Letters 1.0	IBM	72
Bouncy Bee Learns Words 1.0	IBM	62
Castle Clobber	Apple, IBM*, C64, Atari	56
Cat 'n Mouse	Apple*, IBM	65
Charlie Brown's ABC's	Apple*, C64, IBM	64
Color Me	Apple*, IBM, C64 ($34.95)	89
Come Play With Pockets	IBM	66
Comparison Kitchen	Apple*, IBM	72
Creature Creator	Apple*, IBM	62
Delta Drawing	Apple, IBM*, C64*	78
Dinosaurs	Apple*, IBM, C64 ($34.95)	65
Early Elementary I	Apple*, Atari, IBM	27
Early Games	Apple*, IBM, C64, Atari	60
Easy as ABC	Apple*, Mac, IBM, C64	82
Electronic Crayon Series	Apple* (128K), IBM, C64	74
Ernie's Magic Shapes	C64*, Atari, IBM	45
Facemaker	Apple, IBM*, C64, Atari	54
Fantastic Animals	Apple*, IBM, C64 ($7.99)	70
Fun With Letters and Words	IBM	76
Fun With Memory	IBM	77
Fun With Numbers	IBM	59
Gertrude's Secrets	Apple*, IBM*, C64 ($29.95)	84
Getting Ready to Read and Add	Apple, IBM*, Atari, C64*	63
Happy Birthday, Pockets	IBM	71
Hodge Podge	Apple*, C64, IBM, Atari	51
Introduction to Counting	Apple*, IBM, Atari	66
Juggle's Rainbow	Apple, IBM*, C64	62
Kid's Stuff	IBM*, Apple, Atari ST	76
Kids on Keys	Apple*, IBM, C64 ($20.95), Atari	62
Kidwriter	Apple*, C64*, IBM	73
Kindercomp	Apple, IBM*, C64, Atari	68
Kindercomp Golden Edition	Apple*, IBM	70
Koala Pad Graphics Exhibitor	Apple IIe*, II+, IBM	76
Make a Match	Apple*, IBM*, Atari	75
Mask Parade	Apple*, IBM, C64	84
Math Magic	Apple*, IBM	53
Math Maze	Apple*, IBM, Atari ($19.95), C64	52
Math Rabbit	Apple*, IBM	78
Memory Master	IBM*, Atari ST	56
Moptown Parade	Apple*, IBM*, C64	55
Muppets On Stage	Apple*, IBM, C64	81

Title	Computer (* = version reviewed)	Overall Rating
Music Maestro	Apple*, IBM, C64, Atari	73
My ABC's	IBM	63
My Letters, Numbers, and Words	IBM*, Apple, Atari ST	46
Notable Phantom, The	Apple*, IBM, C64	66
Number Farm	Apple*, C64, IBM	74
Path-Tactics	Apple*, IBM, C64	69
Peanuts Maze Marathon	Apple*, C64, IBM	46
Peanuts Picture Puzzlers	Apple*, C64, IBM	59
Picture Perfect	Apple*, IBM	79
Play Together Learn Together	Apple*, IBM, C64	44
Pockets and Her New Sneakers	IBM	62
Pockets Goes on a Picnic	IBM	61
Pockets Goes on Vacation	IBM	63
Pockets Goes to the Carnival	IBM	68
Pockets Leads the Parade	IBM	75
Primary Editor 1.0	IBM	56
Puzzle Master	Apple*, IBM, C64	84
Race the Clock	Apple*, IBM	69
Reader Rabbit	Apple*, IBM, C64, Apple IIGS	71
Shape & Color Rodeo	Apple*, IBM, C64	73
Spellicopter	Apple*, IBM, C64	66
Spelling and Reading Primer	Apple*, IBM, C64	51
Stickers	Apple, IBM*, C64	84
Stickybear Math	Apple*, IBM, C64	81
Stickybear Numbers	Apple*, IBM, Atari, C64	64
Stickybear Reading	Apple*, IBM, C64	77
Stickybear Typing	Apple*, IBM, C64	42
Story Machine	Apple*, IBM, Atari, C64, TI	69
Talking Textwriter	Apple (128K), Apple IIGS, IBM	80
Telling Time	Apple*, C64, TRS 80, IBM, Atari, Pet	34
Tink's Adventure	Apple*, C64, IBM, Atari	41
Tink's Subtraction Fair	Apple*, C64, IBM, Atari	59
Tinka's Mazes	Apple*, IBM, C64, Atari	43
Tonk in the Land of Buddy-Bots	Apple*, C64, IBM, Atari	56
Toybox	C64*, Apple (128), IBM	73
Tuk Goes to Town	Apple*, C64, IBM, Atari	41
Up & Add 'Em	Apple*, IBM, C64	75
Writing to Read 2.0	IBM	45

ATARI (37 titles)

Title	Computer (* = version reviewed)	Overall Rating
Alien Counter & Faceflash	Apple*, Atari	51
Alphabet Arcade, The	Apple*, C64, Atari	42
Castle Clobber	Apple, IBM*, C64, Atari	56
Early Elementary I	Apple*, Atari, IBM	27
Early Games	Apple*, IBM, C64, Atari	60
Ernie's Magic Shapes	C64*, Atari, IBM	45
Facemaker	Apple, IBM*, C64, Atari	54
First Letters and Words	Apple IIGS*, Mac, Amiga, Atari ST	74
First Shapes	Apple IIGS*, Mac, Amiga, Atari ST	78
Getting Ready to Read and Add	Apple, IBM*, Atari, C64*	63
Grandma's House	Apple*, C64, Atari	68
Hodge Podge	Apple*, C64, IBM, Atari	51
I Love My Alphabet	Apple*, C64, Atari	59
Introduction to Counting	Apple*, IBM, Atari	66
Jar Game & Chaos, The	Apple*, Atari	42
Kid's Stuff	IBM*, Apple, Atari ST	76
Kids on Keys	Apple*, IBM, C64, Atari	62
Kindercomp	Apple, IBM*, C64, Atari	68
Learning With Leeper	Apple*, C64, Atari	69
Letter-Go-Round	C64* (cartridge), Atari	56
Make a Match	Apple*, IBM*, Atari	75
Math Maze	Apple*, IBM, Atari, C64	52
Memory Master	IBM*, Atari ST	56
Monkey Math	Apple*, C64, Atari	49
Music Maestro	Apple*, IBM, C64, Atari	73
My Book	C64*, Atari	38
My Letters, Numbers, and Words	IBM*, Apple, Atari ST	46
Preschool IQ Builder I	Apple*, C64, Atari, PET*	38
Space Waste Race	Apple*, Atari, TRS 80	49
Stickybear ABC	Apple*, Atari, C64	59
Stickybear Numbers	Apple*, IBM, Atari, C64	64
Stickybear Opposites	Apple*, Atari, C64	73
Stickybear Shapes	Apple*, Atari, C64	70
Story Machine	Apple*, IBM, Atari, C64, TI	69
Telling Time	Apple*, C64, TRS 80, IBM, Atari, Pet	34
Tink's Adventure	Apple*, C64, IBM, Atari	41
Tink's Subtraction Fair	Apple*, C64, IBM, Atari	59
Tinka's Mazes	Apple*, IBM, C64, Atari	43
Tonk in the Land of Buddy-Bots	Apple*, C64, IBM, Atari	56
Tuk Goes to Town	Apple*, C64, IBM, Atari	41

APPLE II GS (4 titles)

Title	Computer (* = version reviewed)	Overall Rating
First Letters and Words	Apple IIGS*, Mac, Amiga, Atari ST	74
First Shapes	Apple IIGS*, Mac, Amiga, Atari ST	78
Reader Rabbit	Apple*, IBM, C64, Apple IIGS	71
Talking Textwriter	Apple (128K), Apple IIGS, IBM	80

MACINTOSH (6 titles)

Title	Computer (* = version reviewed)	Overall Rating
ABsCenes	Apple*, IBM, Mac	50
Arithmatic	Apple*, IBM, Mac	60
Easy as ABC	Apple*, Mac, IBM, C64	82
First Letters and Words	Apple IIGS*, Mac, Amiga, Atari ST	74
First Shapes	Apple IIGS*, Mac, Amiga, Atari ST	78
Match-On-A-Mac	MacIntosh (128K)	73

AMIGA (7 titles)

Title	Computer (* = version reviewed)	Overall Rating
Beginning Counting	Amiga (512K)	43
Beginning Reading Skills	Amiga (512K)	57
Early Math	Amiga (512K)	43
Facemaker Golden Edition	Apple*, Amiga	61
First Letters and Words	Apple IIGS*, Mac, Amiga, Atari ST	74
First Shapes	Apple IIGS*, Mac, Amiga, Atari ST	78
Learning the Alphabet	Amiga (512K)	50

TRS 80 (7 titles)

Title	Computer (* = version reviewed)	Overall Rating
Counting Skills	Apple*, TRS 80	40
Jr. Typer	Apple*, TRS 80	41
Language	Apple*, TRS 80	37
Ordering/Sequencing	Apple*, TRS 80	38
Space Waste Race	Apple*, Atari, TRS 80	49
Starting Out: Set 1	Apple*, TRS80	45
Telling Time	Apple*, C64, TRS 80, IBM, Atari, Pet	34

APPENDIX 5: GLOSSARY

Definitions are given here for *Survey* terms or computer terms that may be unfamiliar to the reader.

BASIC — Acronym for Beginners All-purpose Symbolic Instruction Code. A language often used with microcomputers, using word-like commands rather than numerical codes. A relatively easy language to learn.

Branching — The capacity of a program to adjust its level of challenge to match the child's performance, an important component of Computer-Managed Instruction (CMI). For example, if the child performs a task poorly, the program automatically presents a simpler task.

Chip — A tiny silicon surface containing a computer circuit.

Computer literacy — Familiarity with the parts of a microcomputer and some measure of programming skill.

Computer-Managed Instruction (CMI) — A capacity of a computer program that allows a teacher to set up individualized activities. This often includes the ability to sort, print, and automatically update performance records of children who use the program. (See Branching.)

Cricket voice synthesizer — An attachment for the Apple IIc computer. Plugs into the modem port of the computer. Equivalent to the Echo IIb voice synthesizer. Made by Street Electronics Corporation. Costs about $100. (See Echo voice synthesizer.)

Cursor — A symbol, such as a dash or box, that marks on the screen where the next keystroke will occur.

Disk — See Floppy disk.

Disk drive — The mechanism into which the disk or diskette is inserted. Makes the disk rotate as on a record player.

Divergent — See Open-ended.

Drill and practice — A program design that provides repeated practice with specific skills or concepts. Frequently involves answer checking, performance feedback, or chances to review missed problems.

Echo voice synthesizer — A computer attachment that permits computer output to be spoken. Plugs inside the computer. Requires special software that takes advantage of speech capability. Costs about $100. Made by Street Electronics Corporation. (See Cricket voice synthesizer.)

Embedded reinforcements — A program's pictures or sounds that relate to and work with the content, rather than being merely entertaining or attention-getting.

Floppy disk — A vinyl disk, coated with magnetic material, on which computer programs can be recorded for storage. Also called diskette.

Graphics — The pictorial part of a program presented on the screen. Often animated and in color.

Hardware — The physical equipment that makes up a computer system, such as the monitor, computer, keyboard, printer.

Icon — A picture or symbol that stands for a word. Often used in menus to make a program usable by nonreaders.

Imagewriter — A printer designed for Apple computers. The Imagewriter II can print in color if it has special ribbon.

Joystick — A computer attachment. Moving the joystick handle up, down, left, or right makes an object or cursor move in corresponding directions on the screen. A button on the joystick may also be used to stop or start action or pick up an object.

K — An abbreviation for Kilo, or thousand, usually referring to a computer's memory size in bytes. A 64K computer, for example, has 64 thousand bytes of memory. A byte can be roughly translated as one alphabet character.

Key experiences — The learning objectives of the High/Scope Curriculum. Approximately fifty guideposts for planning classroom activities and evaluating learning progress.

Koala Pad — A book-sized, touch-sensitive pad that allows information to be entered into the computer by drawing with a stylus or finger on the pad. Mostly used for drawing.

Light pen — A pen-shaped attachment sensitive to the light of the computer's TV display. Can be used to "draw" on the screen or to point to and select objects or areas on the screen.

Load — To copy a program's instructions from a disk or tape into the computer's memory.

LOGO — A computer language that uses a combination of simple instructions and graphics. Commonly used to introduce programming procedures to children.

Memory — An ability of a computer system to store information for later retrieval.

Menu — A list of a computer program's choices displayed on the screen.

Microcomputer — A desktop-sized computer with many of the capabilities of larger computers.

Monitor — The video display device attached to most microcomputers. Like a television screen without a channel tuner.

Mouse — A handheld computer attachment whose movement (left, right, up, or down) on a desk moves objects or a cursor in corresponding directions on the screen. A button on the mouse may also be used to stop or start an action or pick up an object.

Muppet Learning Keys — A separate keyboard that plugs into a joystick port. Contains numbers 0-9 in left-to-right order and letters in alphabetical order, plus eight color keys. It requires specially designed software. Produced by Sunburst Communications, it costs about $100.

Open-ended — The quality of computer programs, such as word processing, programming, and drawing programs, that allows many different results to be produced.

Paddles — A computer attachment with dials that can be turned to move an object or cursor on the screen. Similar in operation to knobs of an Etch-a-Sketch game.

Password — A word or code that allows a child to use parts of a computer program, or gives access to his or her stored files.

Peripheral — An attachment to the computer, such as a keyboard, monitor, printer, mouse, or voice synthesizer.

PowerPad — A large (12" by 12") touch-sensitive graphics tablet that plugs into the Apple II, IIe, or IIGS computer (not the IIc). Often used with picture templates that can be laid over its surface, allowing children to press pictures to enter answers into the computer. Also called WonderWorker. Produced by Dunamis, Inc., it costs about $200.

Program — An organized set of instructions, written in a computer language, that makes the computer perform a specified task. Programs are referred to as "software."

Programming — The process of giving the computer instructions. Several programming activities exist for children, e.g., for drawing — "Delta Drawing" and "LOGO"; for programming the movements of a face or object — "Facemaker," "Creature Creator."

Simulation — A program that models a real-life situation, such as the operation of a lemonade stand, the flying of an airplane, or the exploration of a volcano. Simulations are frequently designed to allow children to practice skills or concepts in a lifelike situation.

Software — The information that controls the computer. This information is usually stored on an electromagnetic medium such as a disk or tape. See Program.

Touch Window — A touch-sensitive transparent screen that fits over a computer monitor, allowing information to be entered into the computer by touching screen images with a finger or stylus. It requires specially designed software. Produced by Personal Touch Corporation, it costs about $200.

Tutorial — A computer program, or part thereof, demonstrating a process or skill, such as matching objects one-to-one, with provisions for children to model or try the same process or skill on their own.

WonderWorker — See PowerPad.

Word processor program — A program that enables a child to use the computer to write, as with a typewriter. Word processing programs usually have additional features, such as ability to edit, save, and recall written material; ability to reformat written material; and ability to choose print style.